Det. Bel Isle & Windsor Ferry Co. 68

DEVOTED TO NAVIGATION, COMMERCE, ENGINEERING AND SCIENCE.

VOL. X NO. 27. CLEVELAND, O., JULY 5, 1888. $2.00 PER ANNUM. SINGLE COPIES 5 CENTS.

AROUND THE LAKES.

CLEVELAND.

The lake rides given by the City of Detroit were enjoyed by a large number of our citizens.

The gross tonnage of the Neosho, launched on Saturday, is 1,982.98 tons and net 1,659.12 tons.

The steamer Atlantic with quite a large list of passengers, seeking the balmy breeze of the lake, and sylvan shades of the islands left her dock early yesterday.

Captain George Simpson, compass adjuster, after quite an extended trip around the lakes in his vocation of compass adjuster was in the city yesterday.

The schooner Frank D. Ewen, 838 tons, recently launched at F. W. Wheeler's West Bay City yard for Hawgood and others, hails from Cleveland. She is valued at $50,000 and is classed A1.

The tug S. S. Stone, while endeavoring to bring the schooner F. W. Gifford inside the breakwater, parted her tow line and the vessel was drifting onto the east pier, but the tugs Dreadnaught and Maggie Sanburn went to the assistance of the Stone and the three succeeded in bringing the vessel around in safety.

Captain John Cotton has been appointed master of the steamer Brittanic, (vice Captain Preston,) last week on the middle ground on account of an unavoidable accident, the breaking of the season on the end of the quadrant, allowing the wheel chains to drop off, thus rendering the wheel useless.

Captain "Bob" McNiff and Son, proprietors and keepers of the McNiff range lights, at the east end of St. Clair flats, is spending a few days in the city. Captain Bob has been under the weather for a long time, but we hope soon to see that "Richard's himself again."

A great job at unloading ore was performed at the New York, Ohio & Pennsylvania docks last Thursday. Work was begun on the propeller Smith Moore, laden with 1,500 gross tons of ore, at 7 o'clock in the morning, and at 4:30 o'clock in the afternoon the boat was unloaded. The work was done with a Brown hoist, six legs being used.

When the present season of navigation was opened no customs officers could be stationed in the river office on account of a shortage of appropriations. It was said then that money would be obtained about July 1 with which to increase the number of deputies under the collector of customs to a complete working force, but as yet the office has not been opened and Cleveland's marine interests are laboring under a big disadvantage.

Among the arrivals at this port on Thursday was the new steamer Servia, recently launched from F. W. Wheeler's yard, Bay City. Her length of keel is 245 feet, beam 40 feet, hold 21 feet. Her cost is put at $115,000. She is ready for business, and on arrival here went to Andrews & Hitchcock's docks where she loaded coal. She will tow the schooner Moravia, which is to be her consort for the remainder of the season.

An exodus of shipbuilders will take place on the 21st instant. Mr. J. F. Pankhurst and wife will go to France, where their daughter, Mrs. Taylor, is now sojourning, after visiting the shipyards in England and Scotland. Messrs. Thomas and George Quayle, and probably William Quayle, will, after looking over the shipyards in England and on the Clyde, visit the old home of their father on the Isle of Man, and Mr. Jackson, of the firm of Ward & Jackson, shipsmiths, will make a pleasure trip through the shires of England.

During the storm last Thursday night the schooner H. F. Church, which was lying at the pier ready to depart, sprung aleak, and the water washing over the rails she settled to the bottom. When the alarm was given the master, Captain C. B. Hughes and men, stepped out of their births into water knee deep. The Church, which is owned by Mr. Jenkinson, of Port Huron, had on a cargo of 700 tons of coal for Point Edward, which is insured for $1,400. The life-saving crew rescued the effects of the master and crew after taking off the men.

In the report of the commissioner of navigation we find the following lake vessels: Schooner May Flower, Milwaukee, 230.40 gross tons; schooner Odd Fellow, Marquette, 10.75 gross tons; sloop Swallow, Cape Vincent, 15.02 gross tons; steamer Companion, Toledo, 196.60 gross tons; steamer Geneva, Cape Vincent, 91 45 gross tons; steamer Jesse Bain, Cape Vincent, 39.03 gross tons; Lucille, Detroit, 8.43 tons; Neosho, Cleveland, 1982.98 gross and 1659.12 net tons. The Neosho was the largest boat launched in the United States during the week.

Captain Murch, under whose supervision the Northern Light was constructed, is loud in his praise of the new boat; he says she is the nicest steering boat he ever saw, and that she is superior in all respects to what he anticipated. She made the run across Lake Huron with 2250 tons of package freight and flour, besides about 225 tons of fuel, turning up 75 revolutions of the wheel, with 140 pounds of steam, and cutting off at 19 inch stroke, at the rate of 13½ miles per hour, which, for a new boat, on her first trip, is extra good. On her trip up she had 2300 tons of coal, and 235 tons of fuel, on 13 feet 3 inches forward, and 14 feet aft.

The Detroit and Cleveland steamboats have fairly entered upon their summer programme. The City of Cleveland made an excursion to Put-in-Bay on Thursday and on her return left for Detroit on her regular time. After this week a regular excursion will be made to the Islands on each Thursday during the months of July and August. No excursion is made this week on Thursday on account of the several lake trips to be made on the 4th of July. For the benefit of those who wish to spend the 4th of July in Detroit the company has planned an excursion at the low price of $2. Excursionists will take the City of Cleveland on Tuesday evening, July 8, and leave Detroit on the same boat Wednesday night, so that parties can spend the glorious Fourth in Detroit if they wish to.

Mr. Lawrence Distel, No. 1, at the life-saving station, who is always ready to help any one who is trying to keep his head above water, came near losing his life last week. A small sailboat, hired out by Mr. Law to some greenhorns, capsized, spilling the contents into the drink. The dinghy, with three men, was at once sent to the rescue from the life-saving station, but Distel, seeing that the boat would not arrive in time, ran down the pier and jumped in to save a heavy boy who could not swim. The drowning boy laid hold of Distel and it was with the utmost difficulty that he could free himself so that he might do some good. The dinghy arrived in time to assist him and all were saved. Some restriction should be put on letting sailboats to persons who do not understand the handling of sails, or that the weight of one man will capsize.

The annual regatta of the Cleveland yachting association was held Wednesday, July 4, and taken all around, was a very enjoyable affair except by the party on the flag ship Wasp. Although the wind was very light and the excitement did not run so high as it has on other like occasions. Messrs. W. J. Southworth, Chas. A. McMasters, of Toronto and H. D. Coffiberry, were appointed judges and the signal was was given to the two starters the Petrel and Unique. The wind dying away, all interest was lost in the contest and the party aboard the Wasp was left to the mercy of Mr. Gardner and his hospitality. We have thus far heard no complaint. The Inter lake race is set for some time next week, Saturday probably. It is expected that there will be a full list of entries in each class, and some smart seamanship may be looked for.

The Globe Iron Works Co. will ship the last two of four large sulphite boilers, made by them for the Dexter Pulp and Paper Co., Dexter, N. Y., some time next week. They are 45 feet long by 13 feet diameter, and weigh 41 tons each. They will probably not tow as consorts to Frank Wright's new boat, which was not launched July 4.

At the Cleveland Dry Dock, since our last report, they have had the steamer Raleigh in for new sea cock pipe; the schooner James Couch for calking; tug Forest City for new brasses and repairs to her steam bearings; tug Araxes for repairs to stem bearings and the steam-barge Tempest for a new wheel. The schooner John T. Merrill is having her top sides thoroughly recalked, and will follow the Tempest into the dock for general repairs.

Meteorological summary for the week ending July 4, 1888:

Mean actual barometer	30.04
Mean temperature	69.6
Mean humidity	70 4
Total precipitation	1.10
Prevailing direction of wind	N. E.
Total wind movement	1250
Av. cloudiness	4 0
Av. state of weather	Fair.
Max. temperature, highest	88 0
Min temperature, lowest	57.9

W. H. HAMMON, Sergt. Signal Corps, U. S. A.

CHICAGO.

Special to the Marine Record.

Captain G. W Pardee, who was 1st mate on the steambarge Otego of Marquette has been put in command of her.

The Chicago Dry Dock Company are giving their dry dock extensive repairs.

A quick bit of loading was done at Manistee last Friday, June 30th, the steambarge Joy taking on a load of 3,272,000 shingles and 21,500 feet of lumber at Buckley & Dudley's mill, in six hours.

The Dunham Towing and Wrecking Company succeeded in raising the steamer A. C. Van Raalte sunk at Muskegon. She was found in better shape than expected and will be forced up and run as a passenger steamer again soon as possible.

The steambarge S. C. Baldwin, and consorts India, Grace Whitney, and Dashing Wave arrived here Monday evening from Ashland, with 1,456,000 of lumber.

At Miller Brother's shipyard, the steambarges Hickox and Michael Groh were in dock for new wheels, the schooner Coral for calking, the tug W. H. Wolf to have her stern bearing fixed, the tugs John Miner and W. L. Ewing were at the derrick and received repairs to their stern bearings, the tug Mary McLane is receiving a new pilot house, the schooner Alice received a new jib-boon, the steamship Jesse H. Farwell is receiving considerable repairs to her stern, the schooner Rosabelle some necessary repairs.

Friday morning last, the tug Mary McLane was coming down the south branch of the river towing the schooner A. L. Andrews, loaded, and when approaching the last draw of Madison Street Bridge, the tug Shields towing the schooner Levi Grant, light, tried to pass the Mary McLane and her tow and in doing so she towed the Grant across the Mary McLane and the Grant's bobstays and back ropes took the pilot house off the McLane. Captain Mike Driscoll luckily escaped with a slight injury to his hand, although he had a close call for his life or for very serious injury.

The Mary McLane went to Miller Brothers for a new pilot house.

The excursion steamer Ivanhoe, with a crowd of excursionists aboard became unmanageable Monday morning, and with a full head of steam on crashed into the Rush street bridge. A stampede among the passengers ensued, women fainted, children went into paroxysms, men beside themselves with fear threw off their outer habiliments, and endeavored to jump overboard. Quiet was with difficulty restored.

At 1:30 o'clock Tuesday morning James E. Costello, first mate of the propeller Minnesota, lying in the South Chicago harbor, was shot and perhaps fatally injured. He went to Jenny Jones' house of ill fame on Harper avenue near the dock to deliver a message. She refused to admit him and when he tried to force the door she shot him. He was taken to the county hospital and she to the county jail. Costello's condition is pronounced as extremely critical.

The Mecosta ran into the steambarge J. H. Farwell in the north branch Tuesday morning, knocking a hole into her port quarter as big as a barn door. The Farwell went into Miller's drydock for repairs.

Two members of the life saving crew will hereafter patrol the lake front on the north side in a lifeboat. This, however, only on Sunday when the amateure skipper and too trustful maiden "go down to the sea in ships."

P. H. Fleming, of Beckwith & Fleming, agents of the Lehigh Valley line, and general vessel agents, is to leave for the east next week on an extended trip. He will make flying trips to New York, Washington, Philadelphia, Boston and other cities.

The customs officials urge the necessity upon masters of carving the net, not gross, tonnage on the main beams of vessels. Delinquents in this respect need expect no quarter.

The Chemung will not load here. She left for Milwaukee to load package freight for Buffalo.

The Hon. Wiley M. Eagan is taking a much needed rest. He will remain out of town for a week or ten days.

Considerable oil cake is going east by lake. The carriers are getting considerably less than 20 cents for its transportation.

There is more money and peace of mind and less annoyance in carrying cedar ties this year than in lugging grain at going rates.

The new steambarge Gogebic made her first appearance here Tuesday. She carries no canvass and excited considerable comment because of the absence of it. What if her machinery broke down in mid-lake?

Rates continued active and unchanged on a basis of 1⅝ cents for oats, 2 cents for corn, and 2¼ cents for wheat to Buffalo. There was a fairly good demand, the supply being amply sufficient to meet all inquiries.

The steamship Rosedale, of Sunderland England, arrived from London, England, with 1,100 tons of cement Friday at 6:45 a. m. in command of Captain James Hewitt. Her appearance at this port was eagerly looked for. Thousands of people watched the strange looking craft as she was towed up the river by the tug R. Prindiville. She constructed with a stoke hole bulkhead an engine room bulkhead and a bulkhead aft and a water ballast bottom capable of carrying 350 tons of water ballast when she is light. She is to be lengthened 70 feet aft after the close of navigation which will give her a better appearance. At present she looks like two ends of a ship without any amidships and handles accordingly in our river one tug having great difficulty in taking her up the river. She proved an excellent sea boat coming across the Atlantic, although she rolled very much. The officers' cabins are very substantially and well fitted out and her machinery is of the best. She left Chicago Tuesday evening after bridge hours with 40,000 bushels of grain for Kingston.

WILLIAMS.

TOLEDO.

The steambarge Michigan dropped the barge John Ritchie at Turtle light yesterday. After towing the Lillie May and Clinton to this port, the Michigan returned in search of the Ritchie. She was found ashore. Her crew was taken to the Michigan in a yawl, except one man who refused to leave the boat. A heavy fog was rolling. The Ritchie had on 250,000 feet of lumber for a Sandusky firm. The man left upon the wreck was a Frenchman from Tonawanda, known only by the name of John. He escaped in a yawl and was picked up by the keeper of the Turtle light.

PORT DALHOUSIE.

The wrecking tug McArthur arrived here Saturday. She is waiting for the weather before commencing to wreck the barge Oriental that was sunk off here last fall. The tug John Hunter arrived to go on dock for repairs. The yachts Natus and White Wings came off dock and are ready to leave.

DETROIT.

Special to the Marine Record.

Marine news at this port, excepting, of course, the passages of vessels, is very scarce. "Old timers," who have been on the river for years, cannot recollect of any year when news of any interest to a marine paper was so hard to get.

Captain John Oades' yard is running full force again, and unless the influx of ship carpenters ceases John will begin to think that no one in Detroit works at anything but ship-building.

The scow-lighter, to tow as consort to the Charles Hebard, is getting along finely, and while we are speaking of the Hebard, the owners have informed Captain Oades that since the Hebard carries 100 ms. more lumber than the contract calls for on the same draft, and makes better time than they expected, they are highly pleased with her and say if they had a dozen boats to build Oades should build them all.

Captain Alex Ruelle, the father of Detroit tugmen, is looking for some one to "tread on the tail of his coat." Some time ago he made a contract with the parties who are raising or are to raise the sunken steamer California for $75 per day for the voyage up and back, and $40 per day while he was working. On Tuesday he received a telegram to send on his tug if he would do the work for $60 per day while on the voyage up and back, and $40 per day on the job. Alex don't work.

The steam barge Lewis Phanos, lumber laden, was aground at the mouth of the Rouge about three hours Tuesday morning. She was released by the tugs Oneida and O. W. Cheney.

The steamer O. W. Chamberlain, owned by Mr. Murphy, of this city, and seized some time ago by an insurance company for debt, will be sold at public auction July 13. The insurance company base their claims on the fact that the Chamberlain, while towing a schooner, grain laden, was, during a gale of wind, compelled to let go of her, thereby damaging the wheat cargo. The company paid the loss and now seek to recover from the steamer.

The barge George Kelly is at the yard of Captain John Oades, receiving a new lining, some new bottom, and after they shift her foremast aft will put in a new foremast, giving her two spars.

Samuel F. Hodge & Co., are finishing engines for boats building at Grand Haven, Cheboygan and Bay City, and are making general repairs on the tug Pathfinder and steamer Atlantic, and making a new piston for the tug Mollie Spencer.

The United News Association has changed its name and is now the Connors United Marine News Co.

Mr. Mart Parish, of Messrs. Parish Bros. & Peck, paid a flying visit to Buffalo last week.

The new F. and P. M., No. 4, building at the Detroit yard of the Detroit Dry Dock Co., will be launched Saturday, July 7.

The new steamer City of Detroit, building at the Wyandotte yard of the Detroit Dry Dock Co., is all in frame, and the plating is being begun. Work will be rapidly pushed on this boat now the Harlem is off the stocks, and it is expected she will be ready to launch September 15.

HOP.

TORONTO.

There is a large quantity of building stone piled on the wharves at present, and vessels find it difficult to unload on account of this. The schooner Parthenon has been in since Saturday with stone, and has been unable to find wharfage room.

Captain Frank Jackman, of the tug Frank Jackman, complains that the towing business of this port this season is at a very low ebb. Last year was considered dull but this summer it is more so. One of the reasons of the small amount of tugging required here is that there is no through grain arriving here this year, while in former seasons there was a large amount of it. There is also very little doing in lumber.

OCEAN AND INLAND NAVIGATION.

RACINE, WIS., June 30, 1888.

To the Editor of the Marine Record:

DEAR SIR.—Ten years ago the RECORD published an interview between the undersigned and its commissioner. A few days after my arrival home from a trip from Racine to Bristol, England, while master of the brgantine Mechanic, of this port, I then made the statement. In ten years time you will see steel steamers built in England for a direct line from London or Liverpool (perhaps both ports) through to Chicago. It is only a question of when the Canadian authorities will deepen the lower canals and the Welland canal, to complete the direct route to Europe.

I see by this morning's papers that the arrival of the first transaclantic steam ship, "Rosedale," the pioneer of a regular line, thus verifying my predictions at that time. Many of the local papers copied the item and various comments were made on the prediction.

To those that differed from me in my views at that time, I respectfully recall their memory of the points they claimed to verify the position they took (that the distance was too far for the size of vessel that would be put on the trade, to make a success of the business), but transportation by water is yet the cheapest mode of moving all commodities and will ever remain so. When you can transport ten tons by water at a cost of ½ cent per mile for the ten tons and make a business of it.

I have no fears for the direct trade from Chicago to Europe. M. J. KELLEY.

LITERARY NOTICES.

The July CENTURY has for a frontispiece a portrait of Pasteur and his granddaughter by the celebrated French painter, Bonnat. This picture is printed in connection with a timely article on "Disease Germs, and How to Combat Them." The opening illustrated article is in Mr. Edward L. Wilson's series connected with the International Sunday School Lessons, and is on "Sinia and the Wilderness." This article is profusely illustrated with pictures of the scenes of Bible events. Appropriate to the Gettysburg Reunion are the poems by a Northern and a Southern soldier; Colonel Higginson and Will H. Thompson. Colonel Higginson's poem does not refer directly to Gettysburg, but Mr. Thompson's is a tribute by an ex Confederate t the bravery of the Union as well as of the Confederate troops. Mr. George L. Kilmer of the Grand Army, in an article entitled "A Note of Peace," gives a carefully prepared account of the reunions of the "Blue and the Gray." A curious story by Bradner Matthews, entitled, "On the Battle-field," also has relation to Gettysburg. A supplementary paper in the War Series deals with the career of the Confederate ram "Albemarle" and the courageous exploits of her commander, Captain Cook, and those of her opponents, Commander Flusser, Admiral Roe, and Lieutenant Cushing, the chief interest being attached to an unpublished narrative by Cushing, describing his heroic action in the blowing up of the ram by means of a torpedo. The two great illustrated serials of the Century, the Life of Lincoln, and Kennan's Siberian Papers, are continued in this number. In the instalment of the Lincoln History the relations between Lincoln and McClellen are described. Mrs. van Rensselaer's cathedral article is this month on the Lichfield Cathedral. Pennell's illustrations as usual accompany the text. An English paper remarked recently upon the strange fact that England had to look to America for the best descriptions and illustrations of its own cathedrals. The last instalment but one of Dr. Eggleston's novel, "The Graysons," in which Abraham Lincoln is one the principal characters, is given in this number, the young Lincoln coming to the rescue with a novel and effective device. The editorial, and "Topics of the Time," are good.

The high literary quality of the ATLANTIC Monthly is well maintained in the July number. The public has taken kindly to J. P. Quincy's rather weird story, "Miser Farrel's Bequest," which now reaches its closing chapter. "A Changing Order," by Miss Preston goes far to prove that a woman can write upon a large historical topic in a manner to be admired. One of the bright short articles is entitled "A Browning Courtship," which members of the "Browning cult" will probably think much too full of levity. The author is Eliza Orne White. The story by Mr. House, "Yone Santo," retains all the charm with which this narrative began. It was a happy thought of Mr. Aldrich's to run this novel of Japanese scenes along with "The Despot of Broomsedge Cove," by Charles Egbert Craddock. The transition from Tokio to Tennessee is a long stretch, but on that account the more refreshing. Houghton, Mifflin & Co., Boston.

CENTRIFUGAL PUMPS.

We call attention to the wrecking pump shown in the engraving on the sixth page. This pump is manufactured by Messrs. Goulds & Austin of Chicago, Ill., and is in use by many towing and wrecking companies on the great lakes. The pump is of the centrifugal pattern and is built in sizes ranging from 6 inches discharge to 12 inches discharge, having a capacity from 2600 to 12000 gallons per minute. As shown in the cut, the pump has a steam engine on the forward part of the frame, the piston being guided above and below with V shaped guides. The shaft connecting with the pump is made heavy and strong and carcries a large balance wheel, the shaft being provided at either end with thrust bearings The pump and engineare mounted on a wrought iron bed frame carried on four wheels. The whole machine is very compact and durable. The enormous capacity of these pumps make them particularly desirable in case of a wreck. Messrs. Goulds & Austin have recently sold pumps to the Emery Lumber Co., the Escanaba Towing & Wrecking Co., F. W. Gilcrist, J. H. Gillett and Vessel Owners, Towing Co. All of these companies speak in the highest terms of the efficiency of the machine. Messrs. Goulds & Austin will furnish photographs and estimates on application.

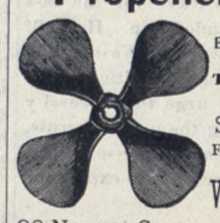
Messrs. Thomas Drein and Son, of Wilmington, Delaware, manufacturers of metallic life boats, life rafts and everything in that line, have completed the following orders: For the Eastern Steam Boat Co., Bath, Me., two 16 feet metallic life boats. Diamond Steamboat Co., Portland, Me., one metallic life boat. Shore Line Transportation Co., Providence R. I., four 16 feet metallic life boats. New sanitarian steamer Pheloda, one 20 feet metallic life boat. Tug Hazel Dell, Albany, N. Y, one metallic life boat and two life rafts. New steamer Monmouth, of New York, four 22 feet metallic life boats and one 16 feet life raft. Steamer Orenis cork life preservers A. P. & L. R. R. Co., for a new steamer, two metallic life boats. Captain F. Stellin's new tug, New York, one metallic life boat Bangor Steamboat Co's., new steamer, metallic life boats, life rafts and cork jackets, besides several orders for the lakes. The above firm have gained for themselves a national reputation as builders of metallic life boats, rafts and cork life preservers, and owners fitting out new or old vessels with life saving appliances of that kind will do well to remember their address.

A reduction in the all-rail rates from Boston has been made by the Soo road, and the new rates went into effect Friday. The new rates, as compared with those heretofore in force, are as follows:

	1st	2d	3d	4th	5th	6th
Former rates,	91	75	64	46	36	29
The new rates,	60	50	40	30	24	20

As stated by the agent of the "Soo" line in this city these rates are quoted from Boston only and the rates from New York will remain unchanged. The reduction of rates to the above figures is understood to be made by the "Soo" line to meet the lake and rail competition by other routes, and as the same rates will probably not be quoted by other lines.—Duluth Herald.

J. R. OLDHAM, C. E.,
Naval Architect,
Marine Inspector.
SPECIAL EXPDRIENCE IN DESIGNING, PRICES SELF-TRIMMING HATCAES, COAL SHUTES AND BLAKL'S PATENT BOILERS.
32 Exchange Bld.,
BUFFALO, N. Y.

Propeller Wheels.

FOR BARGES, TUGS, CANAL BOATS AND YACHTS
Two, Three or Four Blades for
SPEED OR TOWING
From 12 Inches to 14 feet in Diameter
VULCAN IRON WORKS
80 NORTH CLINTON ST., CHICAGO, ILL.

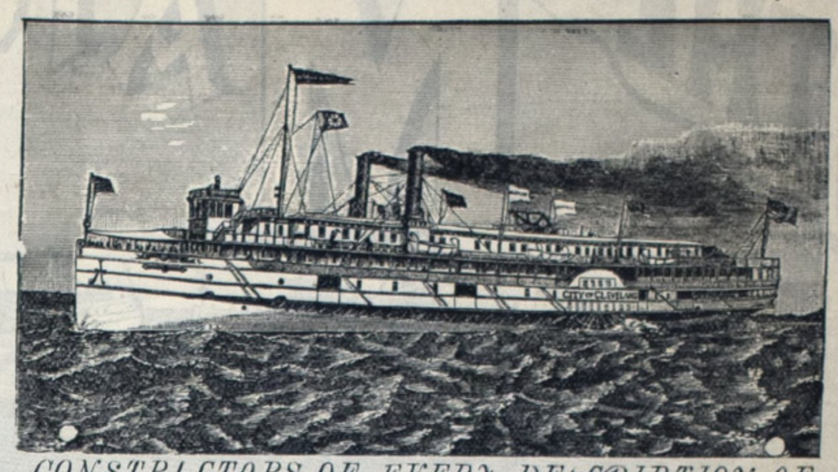
First-class Merchant Tailorin
Done in the nobbiest style, according to monthly new fashion plates, and the *prices made as low* as for ready-made store garments is adopted by Jos. L. Kohn, practical tailor and cutter, who furnishes none but Gent's. finest *Dress Suits, Business Suits,* single *Pants* and *Vests* with the guarantee that none be delivered unless they are to the entire taste of the customer. Call on
KOHN & Co., 213 Detroit street, Cleveland O.

J. W. GROVER & SON.
SHIP CHANDLERS,
SAIL MAKERS AND RIGGERS.
IMPORTERS AND WHOLESALE DEALERS IN
Wire Rope, Manilla, and Tarred Cordage, Canvas, Blocks, Oakum, Tar, Pitch, Oars, Anchors, Chains, etc.
116 & 119 RIVER ST., & 134 & 135 DOCK
CLEVELAND, OHIO.

Grummond's MackinacLine
STM'R ATLANTIC,
Captain J. R. Jones.
LEAVES CLEVELAND EVERY FRIDAY AT 8 P. M., CITY TIME,
For Mackinaw, St. Ignace, Cheboygan, Alpena, Oscoda, and way ports. For passage or freight apply to ANDERSON & CO., Agents, Dock ft. of Superior-st.
S. B. GRUMMOND, Owner.

HENRY ESCH,
Groceries and Provisions,
Fresh and Salt Meats,
DRY GOODS AND CLOTHING.
Special attention given to vessel supplies.
Corner of Jay and 9th st., Manitowoc, Wis.

FOR SALE CHEAP.
THE boiler and machinery of the tug George Hand, all in first class condition. Apply to
HENRY McMORAN or
D. M. RUNNELS,
Port Huron, Mich.

DETROIT DRY DOCK CO.,

CONSTRUCTORS OF EVERY DESCRIPTION OF
Steel, Iron, Composite and Wooden Ships.
SHIP BUILDING WORKS AT WYANDOTTE, MICH.
Dry Docks and Repair Yard, ft. of Orleans-st., Detroit, Mich.

S. B. GRUMMOND,
OWNER OF FIRST-CLASS
Tugs for Wrecking, Raft Towing, Etc.
STEAM PUMPS, ROTARY AND WORTHINGTON.
Improved Horizontal Straight Base Hydraulic Jacks.
Sub-marine Divers, Hawsers, Lighters, Etc.
WAREHOUSE AND OFFICE ON DOCK, FOOT OF FIRST ST.,
OWNER OF TUGS 'Winslow,' 'Leviathan,' 'M. Swain,' 'Champion,' 'Wm. A. Moor,' and 'Oswego.' } Detroit, Mich.
Also, Steam Barge MARY PRINGLE, with Steam Hoister and Wreaking Outfit on Board.
OFFICE OPEN DAY AND NIGHT. SATISFACTION GUARANTEED.
BRANCH OFFICES at PORT HURON & CHEBOYGAN, MICH
WRECKING TUG
LEVIATHAN. CAPT. M. SWAIN, STATIONED AT CHEBOYGAN
With plenty of Wrecking Material on board and in Warehouse.

CRESCENT MANUFACTURING COMPANY.
SOLE MANUFACTURERS OF
THE CYCLONE STEAM FLUE CLEANER.
THE CRESCENT STEEL TUBE SCRAPER.
THE CRESCENT TUBE EXPANDER.
THE CRESCENT COMPRESSION GREASE CUP,
THE CRESCENT HACK SAW.
THE CRESCENT LUBRICATING COMPOUND.
THE CRESCENT BOILER COMPOUND.
SUPPLY TRADE SOLICITED.
CRESCENT MANUF'G Co, 315 Michigan St, Cleveland, Ohio.

Money Saved, Money Gained, Money Well Spent
BY BUYING GOODS DIRECT FROM MANUFACTURERS AT JOBBING PRICES.
W. B. RUDOLF & CO.,
SOLE MANUFACTURERS OF
MANUFACTURERS AND DEALERS IN FINE CYLINDER, ENGINE, LARD, BLACK OILS, WATER-PROOF GREASE PACKING & WIPES RAILROAD. STEAM BOAT AND ENGINEERS' SUPPLIES.

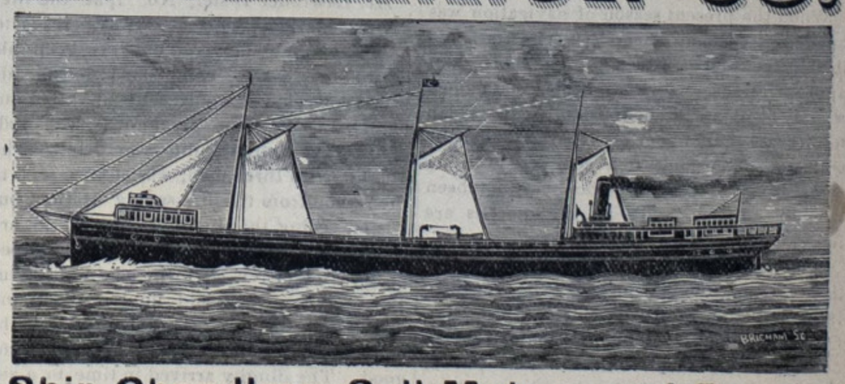
WE STAND READY TO HAVE OUR GOODS TESTED AGAINST ALL OTHERS, AND WILL CHEERFULLY SUPPLY SAMPLE CAN OR BARREL, NOT TO BE PAID FOR UNLESS SATISFACTORY AT THE END OF THE TRIAL; TO BE PAID FOR AT REGULAR RATES WHEN THE GOODS ARE PRONOUNCED SATISFACTORY.
Yearly Contracts a Specialty.
29 South Clinton-st., Chicago, Ill

HULL'S RUBBER STORE

Goodsel's Rubber Back Flax Packing, Steam Packing, Valves Gaskets, etc. Rubber Clothing Boots and Shoes.
PATENTED OCT. 27, 1885.
SPECIAL GRADES OF WATER AND STEAM HOSE FOR MARINE USE.
E. W. HULL, 237 Superior st., CLEVELAND, O. Send for Price List

A PUZZLE.
Which Man is the Tallest?

If you measure carefully the figures in this cut you will find that the man who appears the shortest is in reality the tallest. If you will coal your boats at my dock, adjoining S. F. Hodge Iron Works, you will get better dispatch and better COAL than at any other place in the city.
O. W. SHIPMAN,
OFFICE:
Corner Griswold and Larned Sts

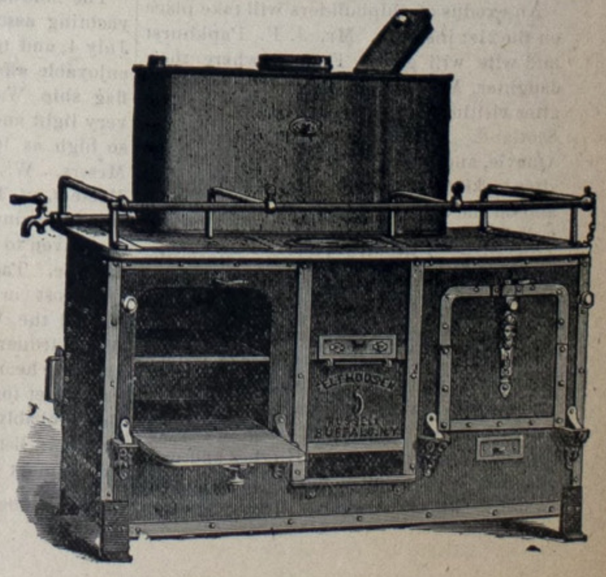
H. CHANNON CO.,

Ship Chandlers, Sail Makers and Riggers.
STEAM-BOAT SUPPLIES.
22 to 26 Market-St. near Randolph-St., Chicago.

MARTIN MULLEN, Agent,
DEALER IN
Youghiogheny & Massillon Coal
DOCKS AT GOVERNMENT PIER AND RIVER BED SLIP.
Office, 81 Perkins Building, East Side of Main Street Bridge, CLEVELAND, OHIO.
Telephone No. 2701.
BOATS COALED DAY OR NIGHT.

SPIEGLE BROS.
MARINE SUPPLY STORE
WHOLESALE AND RETAIL
Grocers, Bakers and Ship Supplies;
Fresh & Salt Meat of all Kind.
30 & 32 River-st., opposite Detroit Steam boat Landing, and 184 Broadway. Telephone 112.

Cosmopolitan Hotel,
HIGH STREET.
ASHTABULA HARBOR, O.
C. Timmerman, Proprietor.
Vesselmen will find this hotel first-class for clean, comfortable rooms and plenty of excellent food and good accommodations.

SIGNAL LAMPS
For Steamers and Sailing Vessels.
PATENT FLUTED LENS AND PERFECT COLORS.
GET THE BEST AND AVOID COLLISIONS.

These Lamps give a more brillant light than any Signal Lamp now in use.
They have been adopted by the principal Ocean and Lake Steamers
Over Ten Thousand Now in Use.
WE ALSO MANUFACTURE THE CELEBRATED
French Wrought Iron Ranges and Broilers of all Sizes for Steamers and Hotels.
Steamboat Copper, Tin, and Sheet Iron Workers.
FELTHOUSEN & RUSSELL,
139 & 141 MAIN ST., BUFFALO, N. Y.


VESSEL OWNERS AND AGENTS.

C. J. MAGILL,
VESSEL AGENT,
Vessels Chartered, Bought and Sold, Lake Freights and River Tow Bills Collected and promptly remitted.
94 Board of Trade, Chicago, Ill.

C. W. ELPHICKE. JAS. A. MYERS
C. W. ELPHICKE & CO.,
Vessel Agents
AND
MARINE UNDERWRITERS.
6 and 8 Sherman St.,
Rooms 10 and 11 Parker Block CHICAGO, ILL.

H. J. WEBB & CO.,
Ship Brokers, Vessel Owners and Agents.
[ESTABLISHED IN 1856.]
H. J. WEBB & Co., will charter Vessels for Lake Trade pecial attention given to Chartering Vessels in the ake Superior Iron Ore Trade, both for the season and ngle trip.
RCADE BUILDING, 101 ST. CLAIR ST.,
Room 27. Cleveland, Ohio.
TELEPHONE { Office, No. 338. Residence, No. 1328.

WARNER & BECKER,
Vessel Agents and Brokers,
ROOM 10,
Arcade B'ld., 101 St. Clair St,
CLEVELAND, OHIO.

J. J. H. BROWN. EDWARD SMITH
BROWN & CO.,
Ship Brokers and Agents.
Special Attention given to Surveying, Appraising and Settling Marine Losses.
Exchange Building, 202 Main-st., Buffalo, N. Y.

ALEX McDOUGALL,
VESSEL AGENT AND BROKER,
Duluth.
Owners and masters of vessels wishing to get cargoes of grain from this port will do well to confer with me. Will be glad to furnish information in regard to cargoes, also in relation to docks, depth of water, etc., at **Duluth, Agate Bay** (new iron ore port), **Port Arthur, Washburn, Ashland,** and all points near the west end of Lake Superior. Good gangs of men furnished on short notice for trimming cargoes of grain, loading and unloading all kinds of freight.

PALMER & BENHAM,
Vessel Owners & Agents,
New Bank Building, corner of Superior and Bank Street, Cleveland, Ohio.

MOORE, BARTOW AND GILCHRIST,
Ship Brokers and Agents,
No. 101 St. Clair Street, Room 15.
CLEVELAND. OHIO.

JAMES T. ROSE,
Vessel Agent and Broker,
Marine Insurance,
Room 6, Exchange Building, Duluth, Minn.
I have an excellent gang of Trimmers this season, Captain Miller's old Crew.
Special Attention Paid to Chartering Vessels, and seeing that they get dispatch in Port.
CORRESPONDENCE SOLICITED.

THOS. WILSON
MANAGING OWNER
Wilson's Transit Line.
Gen. Forwarder. Freight and Vessel Agent.
CLEVELAND, O.

C. A. KING,
General Stevedoring. Discharging Loading and Ore Trimming Promptly Attended to. A Large Force of Men always on Hand. Information in regard to
DEPTH OF WATER OF ALL DOCKS IN
ASHLAND HARBOR
gladly furnished. Quick dispatch guaranteed.
Patronage Solicited.
C. A. KING. Ashland Wis.

WM. H. DeWITT,
Attorney and Proctor in Admiralty.
ROOM No. 6, BLACKSTONE BLOCK.
CLEVELAND, OHIO.

C. E. BENHAM,

DEALER IN
GROCERIES,
AND
PROVISIONS.
Green Canned goods.
FAMILY AND VESSEL SUPPLIES.
GOODS DELIVERED TO ALL PARTS OF THE CITY
121 River-st, Cleveland, O. Telephone 745.

Cleveland Block Co.,
MANUFACTURERS OF
Iron Tackle Blocks
TAKING THE PLACE OF WOODEN BLOCKS FOR ALL PURPOSES.
159 River St., CLEVELAND, O.

H. D. COFFINBERRY, PRES'T. ROBERT WALLACE, VICE PRES'T. WM. M. FITCH SEC'Y.

THE CLEVELAND SHIP-BUILDING COMPANY,

Detroit and Center Streets, Cleveland, Ohio,

IRON SHIPS,

Marine and Stationary ENGINES AND BOILERS,

Blowing Engines and Steam Hammers,

AND MILL GEARING AND CASTINGS.

Repairing and Jobbing Solicited. Office on Viaduct.

We take pleasure in announcing that we have purchased the property, business and good-will of the Cuyahoga Steam Furnace Company, and will add to these works, so long and favorably known, a first-class Iron Ship-building Department, with sufficient room and all modern facilities for building two large vessels at the same time, and a Boiler Shop with most approved tools for large work, including Tweddell's Hydraulic Plant for flanging, riveting, etc.

We have associated with us Messrs. H. D. Coffinberry and Robert Wallace, late of the Globe Ship-building Co., and the Globe Iron Works, and Wm. M. Fitch, late of the Winslow Line of Steamers. We have made the following appointments: Mr. O. N. Steele, Assistant Superintendent; Mr. Thomas W. Bristow, late foreman of Wyandotte Ship Yard, Superintendent of Ship Yard; Mr. Quincy Miller, Superintendent of Boiler Shop; Mr. John Stoney, Superintendent of Foundry, and Mr. Jas. C. Wallace, Draughtsman.

We purpose building Iron and Steel Vessels of all descriptions, Marine and Stationary Engines and Boilers, Blowing Engines, Steam Helve Hammers and such other work as our large assortment of patterns eminently qualify us to build, at a minimum price.

Your patronage is solicited, and we trust that the excellence of our work, with fair dealing and strict attention to business, will secure its continuance.

THE CLEVELAND SHIP-BUILDING COMPANY.

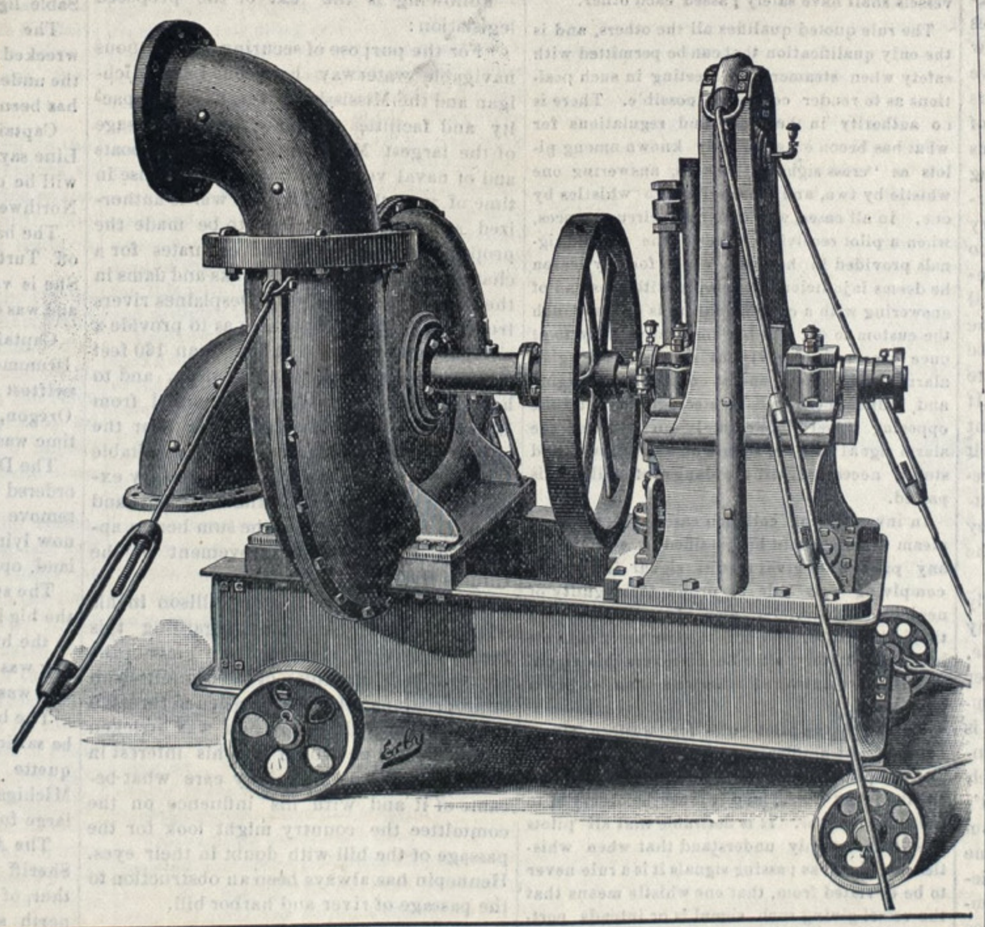
GOULDS AND AUSTIN.

CENTRIFUGAL PUMPING MACHINERY.

Manufacturers of the Finest Wrecking Pumps in the World.

Fu'l Line Always on Hand.

GOULDS & AUSTIN
167 & 169 Lake-st.,
CHICAGO, ILL.



Travelers' Information Bureau.
Ocean, Lake and Railroad
TICKET AGENTS,
224 Bank St.,
CLEVELAND, O

VESSEL PROPERTY FOR SALE.

HARBOR TUG FOR SALE.
THE TUG MYRTLE, of Sandusky, Ohio, for sale cheap. Is in first-class condition. For particulars write to FRED GROCH, Sandusky, O.

A2 VESSELS WANTED.
IN EXCHANGE for improved Buffalo city property, three-fourths of a mile from City Hall, West Side. Fine dwelling houses that always rent.
Address, M. BROS., 22 Root St., Buffalo, N. Y.

FOR SALE.
BARGE COL. BRACKET—She carries 260M feet of lumber, 420 tons of coal. Had $900 worth of repairs last season. Fit out good. Price $1,600. Mention this paper. ED. J. KENDALL, Port Huron.

FOR SALE, the passenger steamer M. E. MINTER, 13 tons net, 60 feet long over all, 18½ feet beam, 4 feet depth of hold. Engine 10x12, Scotch type boiler 4½x8. She is fully equipped for the passenger business. Terms, $2,000. Address,
CAPTAIN RICHARD CONNELL,
Muskegon, Mich.

FOR SALE.
SCHOONER VERNIE M. BLAKE—For sale cheap. Capacity 60 tons; dimensions, keel 55 feet, beam 19 feet 6 inches, depth of hold 5 feet 6 inches.
Address 22 Territt street, Cleveland, O.

STEAMBOAT FOR SALE.
FIRST-CLASS in every respect. Nearly new. Capacity—400,000 feet lumber, 650 tons of ore, 700 tons of coal, 25,000 bushels of grain, and in addition the best tow boat on the lakes and the most economical of fuel. Present owners no further use for her.
Address LUMBER, care of Clowry,
S. W. Div. P. O., Chicago, Ill.

FOR SALE.
THE HANDSOME NEW FORE AND AFT SCHOONER W. C. Kimball, built at Manitowoc last winter, outfit all new and complete, 65 feet over all, 17 feet 4 inches beam, 4 feet 9 inches hold. Tonnage 31, 49
Apply to A. D. JOHNSTON, Manitowoc, Wis.

NOTICE TO MARINE MEN.
LATE official charts, showing the straight channel, now being dredged, and soundings in bay and river are for sale by
GEO. E. HARDY, Marine Collector,
207 Madison street, Toledo, Ohio.
Price 50 cents by mail.

FOR SALE.
A steambarge 125 thousand capacity; will carry 120 passengers, only one year old; a good twelve mile boat in the best, possible condition; will be sold reasonable and on easy terms. For further particulars inquire of MARINE RECORD, Cleveland Ohio.

FOR SALE
CHEAP, for cash, the schooner H. M. Avery, of South Haven; length over all 67 feet, beam 17 feet, depth of hold 5 feet 3 inches; will carry 2,000 bushels of corn, or 42,000 feet of lumber. Came out in May 1887; is very fast. Apply to J. F. SMITH, drawer 6, South Haven, Mich.

FOR SALE
CHEAP.—The hull, engines, boiler and outfit of the burned tug Paddy Murphy, as she lies in Dover Bay. Two H. P engines, 17 square and boiler 14x6½ and were first-class in every respect. Call or address
WARNER & BECKER,
Room 10, Arcade Building, St. Clair St.,
Cleveland, Ohio.

DETROIT BOAT WORKS.
SOLE MANUFACTURERS OF
Clark's Patent Metallic Life Rafts.

HIGHLY INDORSED BY THE BOARD OF SUPERVISING INSPECTORS.
Yawl Boats in stock 14, 16, 18, 20 and 22 feet long. Life Boats in stock 16, 18, 20 and 22 feet long.
Steam and Hand Steering Wheels to Order.
Shops ft. of ORLEANS ST., DETROIT, MICH.

Western Supply Agency,
J. E. WILLIAMS, Manager,
—MANUFACTURERS' AGENTS FOR—
Pure Lard Oils,
Lubricating Oils,
Cotton Wast e & Pure Natural W. Virginia Oils.
—SOLE AGENTS FOR—
ROCKY MOUNTAIN GREASE CUPS AND RELIABLE CRANK PIN GREASE.
STEAMBOAT OILS A SPECIALTY.
OUR CLIMAX CYLINDER OILS IS A FAVORITE WITH MARINE ENGINEERS.
129 RIVER STREET,
Telephone No. 137. CLEVELAND, O.

Marine Record.

Published Every Thursday at 144 Superior Street, [Leader Building] Cleveland, O.

A. A. POMEROY, EDITOR AND PUB.

BRANCH OFFICE:
252 South Water Street, Chicago, Illinois,
THOMAS WILLIAMS, Associate Editor.

TERMS OF SUBSCRIPTION:

One year, postage paid.....$2.00
Six months, postage paid..... 1.00
Invariably in advance.

THE MARINE RECORD can be found for sale by the following news dealers:

CLEVELAND, O.—G. F. Bowman, corner of Pearl and Detroit Streets.

Evans & Van Epps, Superior street, Cleveland.

R. A. Castner, 254 Detroit street, Cleveland.

ASHTABULA HARBOR, O.—C. Large.

CHICAGO, ILL.—Joseph Gray, 9 West Randolph Street.

CHICAGO, ILL.—H. B. Hansen, 33 West Randolph Street.

BUFFALO, N. Y.—Miss McCabe, Elk Street, near Ohio.

DULUTH, MINN.—C. F. Johnson, 323 West Superior Street.

MARQUETTE, MICH.—J. A. Vannier.

ESCANABA, MICH.—Wm. Godley.

ESCANABA, MICH.—George Preston.

SARNIA, ONT.—D. McMasters.

OWEN SOUND, ONT.—J. Sharpe, Jr.

KINGSTON, ONT.—F. Nisbet, corner Brock and Wellington Streets.

Subscribers and others are respectfully invited to use the columns of the MARINE RECORD for the discussion of pertinent topics.

Entered at the Post Office at Cleveland as second-class mail matter.

CLEVELAND, O., THURSDAY, JULY 5.

CLEVELAND VESSEL OWNERS' ASSN'

ORGANIZED IN 1880.

[Membership, 1887]

Sixty-five steamers aggregating.....67,865 tons.
Ninety-five sail and consort, aggregating.60,089 tons.

Maintains shipping offices at Cleveland and Ashtabula Harbor. Regulates wages, protects crews, and takes cognizance of all matters in the interest of its members and of the Lake Commerce generally.

OFFICERS.

H. M. HANNA, - - - - - - President
H. P. LILLIBRIDGE, - - - - Vice President
B. L. PENNINGTON, - Secretary and Treasurer.
H. D. GOULDER - - - - - - - Counsel

EXECUTIVE COMMITTEE.

H. M. Hanna, H. P. Lillibridge, M. A. Bradley, Geo. P. McKay, Thomas Wilson, R. K. Winslow, W. D Rees, J. H. Palmer, J. W. Moore, W. C. Richardson.

SHIPPING MASTERS.

A. R. Rumsey, 98 dock, Cleveland; Fred Bennet, assistant, 98 dock, Cleveland; Wm. Reunick, Ashtabula Harbor.

MARINE RECORD—OFFICIAL PAPER.

THE RIVER AND HARBOR BILL.

As has been the custom of Congress, time out of mind, the river and harbor appropriation bill has been delayed by log-rolling and other reprehensible schemes until the last days of the session. It is now two years since any appropriations have been made for the improvement of rivers and harbors and the condition of many of the unfinished works attest the ruinous policy of the government in withholding funds when it is acknowledged that the surplus lying idle in the vaults of the treasury is enormous and in its inert state doing no one a shadow of good. Last year Congress passed a bill appropriating a liberal sum of money for necessary use but the President refused to sign it. It is to be hoped that the bill passed by the Senate last Monday will not suffer a like fate. If the commerce of the lakes is an important factor in the prosperity of the country it ought to be supported and upheld by removing from its path the difficulties and attending dangers. This can only be done by early and liberal action on the part of the government to that end.

The bill under discussion came up early in the session and it was the hope of many that funds would soon be made available, but such was not the case. It was held over as a good measure for demagogues to compromise difficulties with, and now it is hurried through with the inevitable Hennepin canal scheme and other riders which may again defeat it in the President's hands. It has been said that the criticism and abuse so generally indulged in by some Senators and by newspapers should be denounced. The action of some of the members of Congress, however, are not free from criticism. Many of them doing the dog-in-the-manger act. If they cannot go to their constituents with a liberal slice of this appropriation it is against their inclination to let any one have that satisfaction, however deserving.

As originally reported from the Senate committee on commerce, the bill appropriates $21,562,783. As it finally passed the Senate it appropriates $22,474,783, having been increased by the Senate $912,000. The possibilities of carrying cargo on lake vessels is only equal to the depth of water in the shallowest place over which they must pass. Give us some of the surplus in the interest of commerce and lake navigation, keep bridges from obstructing the Detroit river, build harbors of refuge where they are deemed useful, repair wasted public works, make channels deep enough to accommodate our splendid vessels with full cargoes, add all necessary aids to navigation and all will be proud of the growth of the great northwest and the activity of lake carriers.

AVOID COLLISIONS.

On another page under the sub-head "Detroit," will be found the particulars of two costly collisions, (not in life but in property) in the Detroit River, between the Grand Trunk Company's ferry boat Great Western and the freight steamer Roumania, with the schooner George in tow. The other collision was between the iron tug Westover and the passenger steamer Atlantic. In both instances signals were given and answered but it appears by the results that the signals were misunderstood, or that the sailing master of each craft was willing to stand the consequences of a little hardihood. In the first instance it is stated that the ferry steamer was endeavoring to cross the bows of the Roumania and was struck about amidships, thus showing poor calculation on the part of the master of the ferry boat regarding distance and speed. The result of the second makes it evident that by misunderstanding signals both the Westover and Atlantic endeavored to pass each other on the same side.

It is not supposed that these collisions are the result of ignorance or negligence but of the system of cross signals now so much in vogue on the lakes, and this chance of collision has been provided against in a circular just issued from the office of the supervising inspector of steam vessels, and which will be found appended. The provisions against collision set forth in this circular are plain and should be memorized by masters of all vessels.

[Official Circular.]

CAUTIONARY NOTICES TO PILOTS OF STEAM VESSELS REGARDING THE USE OF SIGNAL WHISTLES.

WASHINGTON, D. C., June 21, 1888.

The attention of pilots of steam vessels is called to the frequent collisions occuring through failure to observe the pilot rules laid down by the board of supervising inspectors, whereas, if such rules were strictly observed collisions would be almost absolutely impossible.

The main causes of collisions result from the failure of pilots to consider Rules 1 to 8, inclusive, in strict connection with Rule 3 of the pilot rules for lakes and seaboard, which rule reads as follows:

Rule 3. If, when steamers are approaching each other, the pilot of each vessel fails to understand the course or intention of the other, whether from signals being given or answered erroneously, or from other causes, the pilot so in doubt shall immediately signify the same by giving several short and rapid blasts of the steam whistle; and if the vessels shall have approached within half-a-mile of each other, both shall be immediately slowed to a speed barely sufficient for steerage way until the proper signals are given, answered and understood, or until the vessels shall have safely passed each other.

The rule quoted qualifies all the others, and is the only qualification that can be permitted with safety when steamers are meeting in such positions as to render collisions possible. There is no authority in the rules and regulations for what has become technically known among pilots as "cross signals," that is, answering one whistle by two, and answering two whistles by one. In all cases, and under all circumstances, when a pilot receiving either of the whistle signals provided in the rules, which for any reason he deems injudicious to comply with, instead of answering with a cross signal, as is now so much the custom to do, it is his imperative duty to at once observe the provisions of rule 3, viz., give alarm signal whistle and at once slow his engine and reduce speed to bare steerage way, and the opposing vessel immediately on hearing the alarm signal whistle, should also slow down, and stop if necessary, till the danger of collision is passed.

In investigating collision cases, inspectors of steam vessels would be justified in considering any pilot who gives a cross signal instead of complying with rule 3, prima facie guilty of neglect of duty. So, also, of the pilot giving the first whistle, who fails to slow up or stop his boat immediately after he discovers his signal whistles are answered otherwise than as given by himself.

Rule 2 of the pilot rules for western rivers has the same application to those rules that rule 3 of the pilot rules for lakes and seaboard has to the latter rules, and it must be observed in the same manner. It is desirable that all pilots should thoroughly understand that when whistles are blown as passing signals it is a rule never to be deviated from, that one whistle means that the vessel giving such signal is or intends porting her helm; two whistles, that the vessel giving it is or intends putting her helm to starboard.

Local inspectors of steam vessels will make requisition on the department for sufficient numbers of this circular to supply each pilot of steam vessels in their respective districts.

JAS. A. DUMONT, Sup. Insp.-Gen.
Approved—C. S. FAIRCHILD, Secretary.

Under the heading "An Interesting Marine Question," the Sarnia Sun says: "The Chemung is the name of the new Union Line steamer expected out shortly, and she it expected to make fast time. The Owego and Chemung will be exactly alike except in make of wheels. The Owego has run from Mackinac to Chicago, 319 miles, in 21 hours 50 minutes; beating the record of 23½ hours by the Susquehanna and Tioga."

A NIAGARA CANAL VS. HENNAPIN.

There should be among the numerous Congressmen from the lake districts one sufficiently interested in lake commerce to introduce and sustain a bill for the construction of a waterway around Niagara Falls of capacity and facilities sufficient to float merchant ships of war of modern build, drawing twenty feet of water. This waterway should commence in a navigable part of Niagara River, in Niagara county, at or near Tonawanda and end in navigable waters of Niagara river below the falls, or some navigable waters connected therewith. To advance this purpose it would be well if the Secretary of War should consider the propriety of directing that a survey be made of the course which such a waterway would take and estimate the cost and benefits. That such a move or improvement would be of more value to commerce than the proposed Hennepin canal no one can justly deny. It would also prove of greater utility and advantage in case of war than would the proposed Chicago sewer. The latter would without doubt have the effect of lowering the lake level, in case it was made large enough to be of any utility, as a volume of water equal to 600,000 cubic feet per hour would flow into the Mississippi river. This lowering of the lake level would not obtain in the construction of a ship waterway between Lake Erie and Lake Ontario, as the water plane of the latter is higher than that of Lake Erie. The lake level is quite low enough at the present time.

While we believe in advocating every available means of improving the water traffic of the country, we cannot see the wisdom of advancing the Hennepin canal scheme. Railroad men are long headed in forseeing any event that will prove detrimental to their interests. We have got to hear an expression from them detrimental to the proposed waterway between Lake Michigan and the Mississippi river. Senator Vest says that a survey and estimate of cost to construct Hennepin placed the expense at 5 811,000. Senator Allison was pleased to say in substance that without the Hennepin canal clause in the river and harbor appropriation bill it was not worth the paper that it was written on and warned the senators that if they ran the bill on a mere local issue, that all that was desirable was to get $5,000 for a little creek or $2,000 for a little harbor, they had mistaken the feelings of the people regarding internal commerce. This is a poor argument or comparison for a man with Senator Allison's usually broad views to make. Senator Sherman in commenting on the proposition spoke of the magnitude of the proposed ship canal. He said that the distance from Chicago to the mouth of the Illinois river at Lasalle was 250 miles, a greater distance than the proposed Nicaragua canal, from ocean to ocean, and the estimated cost of the Nicaragua canal was $95,000,000.

Following is the text of the proposed legislation:

"For the purpose of securing a continuous navigable waterway between Lake Michigan and the Mississippi river, having capacity and facilities adequate for the passage of the largest Mississippi river steamboats and of naval vessels suitable for defense in time of war, the secretary of war is authorized and directed to cause to be made the proper surveys, plans and estimates for a channel, improvement and locks and dams in the beds of the Illinois and Desplaines rivers from Lasalle to Lockport, so as to provide a navigable waterway not less than 160 feet wide and not less than 14 feet deep, and to have surveyed and located a channel from Lockport to Lake Michigan at or near the city of Chicago, such channel to be suitable for the purpose aforesaid; the necessary expenses of such surveys, estimates, plans and location to be paid out of the sum herein appropriated for the improvement of the Illinois river."

The language of Senator Allison in his efforts to carry his point regarding this measure is very significent in view of the fact that he is chairman of the committee on appropriations. He took occasion to threaten senators that if this provision was stricken out of the bill he would lose his interest in it and would not materially care what became of it and with his influence on the committee the country might look for the passage of the bill with doubt in their eyes. Hennepin has always been an obstruction to the passage of river and harbor bill.

In my correspondence to the MARINE RECORD of May 24th, I mentioned that complaints of vesselmen were general, against the delays occasioned at the Wisconsin Central railroad bridge, and was glad to read in the Chicago Tribune, of Wednesday morning, June 27th, which newspaper is usually very hard on tugmen and vesselmen who delay passengers at the bridges, the following:

"Vesselmen make complaint at the way their boats are being held at the Wisconsin Central bridge near Twelfth street. Three vessels were detained fifty-five minutes. The road does much of its switching on the bridge, as its yards on the east side of the river are small, and with this arrangement the vesselmen find the most fault. The question as to whose province it is to see that the bridge is not closed to vessels longer than the legal period has been referred to Commissioner Swift."

I hope that commissioner Swift, will be prompt in awakening the railroad authorities to a sense of right, and compelling to do it.

W.

THE impression obtained that the Lake Superior iron shipments this year are far behind those of 1887, is erroneous. By a comparison of the two seasons' work and allowing for the late opening of the present season the result is in favor of 1888. The volume of shipments this year is holding up fully to last year. The total shipments this year are 1,015 162 tons, against 1,177,867 last year, a difference of 161.905 tons, or about one week's average shipment. Last week's shipments were 180.615, against 155,778 the same week last year. If this rate keeps up the output for 1888 will exceed that of last year.

THERE is promise of a new canal route, or rather a new opening on the old Erie route. The new elevation at Rotterdam Junction, west of Schenectady, is to be finished in a few days, when it is expected that boats will get a good trade there for the New England states, which have always received their grain by all rail routes It is promised further that there will soon be return freights from that port in such eastern products as marble, granite, etc. Boatmen who are posted are expecting quite an opening at this western connection of the Hoosac tunnel route before long.

LITTLE RECORDS.

The steamer Alaska now gives regular Wednesday and Saturday excursions to Put in-bay.

John Rolland, mate of the schooner Trade Wind, was found drowned Monday morning at Oshawa.

The life of the late Captain J. J. Frink was insured for $7,000 in the orders of which he was a member.

Captain J. J. Rardon of Chicago believes that Captain Alex. McDougall's cigar shaped boat cannot be sunk in a storm.

The new Union liner, the Chemung, completed her maiden trip Monday, arriving at South Chicago with coal at five o'clock.

Aspinwall Fuller, late president of the Marine Engineer's Beneficial Association, died suddenly at Boston, on the 23d ult.

The propeller China left Duluth last Tuesday with the largest number of passengers that have sailed from that port in any boat this season.

During the month ending on the 30th ult. shipments from Saginaw river ports were 71,931,000 feet of lumber, 8,807,000 shingles and 2,000,000 lath.

It was the late Captain Frink who, a year ago last fall, in a small tug, saved the forty lives aboard the Florida and the two Wallaces on Lake Superior.

The propeller Robert Mills has been libeled for $15,000 at Chicago for running into and sinking the schooner Willie Keller near Big Sable light last Friday night.

The schooner Morwood, which was wrecked on Grand island last fall and sold by the underwriters to J. H. Gillette of Marquette, has been raised and is now in harbor.

Captain Murch, manager of the North Star Line says the Northern Light's five sister boats will be called the North Wind, North Star, Northwest, North Pole, Northern Bear.

The barge John Ritchie, which went ashore off Turtle island, has become a total loss. She is valued at $3,000. She had no rating and was owned by Pierce & Coleman of Toledo.

Captain A. M. Curtiss, of the ship James Drummond, has now the honor of making the swiftest trip between New York and Portland, Oregon, ever made by a sailing vessel. His time was 109 days.

The Department of Marine at Ottawa, has ordered J. H. C. Atkinson, of Pelee Island, to remove the wreck of the barge A. E. Allen, now lying on the east side of Bois Blanc island, opposite Amherstburg.

The steamship Pascal P. Pratt is the first of the big lake vessels to fling her political colors to the breeze. A fine Harrison and Morton flag was sent up by her owners from Buffalo and was hoisted to the masthead.

The burned steamer Arizona is expected to be sailing under the name of the City of Marquette in a month. She goes into the Lake-Michigan coal and lumber trade. There is a large force at work on her at Port Huron.

The Alpha yacht "Forester" was sold by Sheriff Flintoft last week to General McArthur, of Chicago, who intends to use her on the north shore of Lake Superior, where he is largely interested as president of the Vert Island Quarry Company. She realized $200.

The schooner Alleghany went ashore on the point about two miles below the canal at Duluth during a fog but was pulled off without trouble. She was dropped by the Langell, being bound for Lake Superior, and her master went ashore before he realized where he was.

The schooner Watertown took on a cargo of West Virginia coal at the Ohio Central for Chicago. This is the first cargo that had been consigned to Chicago since 1886. It was shipped by the Marmet coal company, of Cincinnati, and it is believed that this is the beginning of the shipment of quite a number of cargoes from Toledo to Chicago by the company named.

LAKE CARRIERS' ASSOCIATION,

TO CONSIDER AND TAKE ACTION UPON ALL GENERAL QUESTIONS RELATING TO THE NAVIGATION AND CARRYING BUSINESS OF THE GREAT LAKES AND THE WATERS TRIBUTARY THERETO, WITH THE INTENT TO IMPROVE THE CHARACTER OF THE SERVICE RENDERED TO THE PUBLIC, TO PROTECT THE COMMON INTEREST OF LAKE CARRIERS, AND PROMOTE THEIR GENERAL WELFARE.

BOARD OF MANAGERS, 1888.

THOMAS MARTIN, - - - - - Oswego, N. Y.
JAMES ASH, - - - - - - - Buffalo, N. Y.
W. BULLARD, - - - - - - Buffalo, N. Y.
S. D. CALDWELL, *President*, - - Buffalo, N. Y.
E. T. EVANS, - - - - - - Buffalo, N. Y.
W. P. HENRY, - - - - - - Buffalo, N. Y.
P. P. MILLER. - - - - - - - Buffalo, N. Y.
FRANK J. FIRTH, *Vice President*, - Erie, Pa.
M. A. BRADLEY, - - - - - Cleveland, O.
H. M. HANNA, - - - - - - Cleveland, O.
THOMAS WILSON, *Vice President*, - Cleveland, O.
A. W. COLTON, - - - - - - Toledo, O.
JAMES W. MILLEN, *Vice President*, - Detroit, Mich.
EBER WARD, - - - - - - Detroit, Mich.
JAMES DAVIDSON, - - - - - Bay City, Mich.
JOS. AUSTRIAN, - - - - - - Chicago, Ill.
W. M. EGAN, - - - - - - - Chicago, Ill.
IRA H. OWEN, *Vice President*, - - Chicago, Ill.
R. P. FITZGERALD, - - - - - Milwaukee, Wis.
DAVID VANCE, - - - - - - Milwaukee, Wis.
ALEX MCDOUGALL, - - - - Duluth, Minn.
HARRY MURPHY, *Secretary*, - - Buffalo, N. Y.
JAS. CAREY EVANS, *Treasurer*, - Buffalo, N. Y.

MARINE RECORD—OFFICIAL PAPER.

LAUNCH OF THE STEAMER NEOSHO.

The Neosho, the last wooden boat on the stocks in this city, was successfully launched from the upper shipyard of Messrs. Thomas Quayle's Sons last Saturday, June 30, at 3:30 p. m. Quite a large crowd of people assembled to witness the event, among whom were many prominent shipbuilders. All were lavish in their praise of the new craft. This vessel, built for Messrs. R. R. Rhodes, Moore & Bartow, and others, is a fine specimen of marine architecture; her model is exceptionally fine, indicating much speed, great carrying capacity, and light draft, three of the most important points to be considered in the construction of lake vessels. The dimensions of this new boat are, length of keel 265 feet, length over all 283 feet, beam 41 feet, moulded depth 23 feet, with a carrying capacity of 2,200 tons on 14½ feet draft. The keel for the Neosho was laid February 8th of this year; and when we consider that this magnificent boat has been built and launched in four months and twenty-two days, we can but congratulate her builders on the success and rapidity of the work. She has a turtle back forward connected with a bridge to the wheel house, and all her houses are above deck. The cabins are elegantly finished in antique oak with rope mouldings; the captain's rooms in birds-eye maple and cherry, the wheel house in ash, with butternut ceiling, and the men's quarters are nicely done off with a view to comfort and neatness. Her engines are fore and aft compound of the most improved style, cylinders 30 and 54 inches with a stroke of 48 inches, built by H. G. Trout, of Buffalo. Her boilers are steel, Scotch type, 10 by 16½, allowed a steam pressure of 145 pounds to the square inch, from the Lake Erie boiler works, Buffalo. She has a Trout wheel 12 feet, 9 inches diameter, with a lead of 16 feet. No pains nor expense have been spared in furnishing this boat with every modern facility for dispatch in and out of port. She is supplied with a Providence steam windlass and capstan from the American Ship Windlass company, Providence, R. I., a steam steerer from the Williamson Brothers, Philadelphia, and a steam hoisting aparatus from the Globe Iron works company, of this city. Her four spars are to be used more for hoisting purposes than for sail. The iron work was done by Messrs. Ward and Jackson; the steam fitting, including railing around pilot house, the turtle back forward, and stair rails were furnished by Mr. John Thomson, steam fitter, of this city. Messrs. Upson, Walton & Co. will have charge of her fit-out. This vessel will be ready for sea in about ten days, which will make just five months from the laying of her keel to the finish. She will be officered as follows: Master, Captain W. H. Humphrey; mate, Charles Cook; Mr. Christopher Castle, chief engineer. Captain John Bartow was unavoidably detained at his home, by illness, and, it is said, that just at the moment the boat slid along the ways into the water he was heard to murmur:

"She leaped, she sprang into the air,
Then floundered into the Cuyahoga fair;
Submerged 4 feet 9″ before,
And at the stern, 9—8″ or more."

LAUNCH OF THE STEAMER HARLEM.

Special Correspondence to the Marine Record.

WYANDOTTE, MICH., July 3.

Last Tuesday afternoon at 5:30 the new steel steamer Harlem, a sister ship to the successful, speedy Hudson, was neatly and completely launched into the waters of the "only Detroit" river from the Wayandotte yard of the Detroit Dry Dock Co.

This new steamer, built by the Detroit Dry Dock Co., for the Western Transit Co., is a splendid boat, built of the very best material and no pains or expense has been spared to make her equal to anything afloat. She is 304 feet over all, 286 feet keel, 41 feet beam, 22 feet moulded depth, and has a capacity of 2,600 tons, on 15 feet draft, and is calculated to speed 14 miles per hour. Her plating is exceptionally smooth and fine, a characteristic of all boats built under the superintendence of Mr. Fritz Kirby. Her engines are triple expansion, with high pressure cylinders 23 inches, intermediate

36 inches, and low pressure 62 inches diameter, with a stroke of 48 inches. She will have two steel Scotch type boilers, each 11 feet diameter by 18½ feet length, allowed 160 pounds of steam to the square inch, all built by the Dry Dock Engine Co. Among the many modern and improved machines for handling boat and cargo are to be found the Providence steam windlass and capstan, from the American Ship Windlass Co., Providence, R. I., the Williamson steam steerer from Williamson Bros., Philadelphia, Pa., and the hoisting apparatus, manufactured by the Dry Dock Engine Co., of Detroit. The Harlem has three spars which will be fitted with canvass by Mr. J. P. Donaldson, who will have charge of rigging and fitting her out for sea. She has three houses, which are all on deck. The cabins are nicely finished in butternut and the forecastle is large, roomy and comfortable. Particular attention has been given, in the construction of this boat, to facilities for taking on and discharging cargo. She has four main hatchways and four gangways on each side, giving opportunity for quick loading and unloading. As she lay on the ways ready for launching her fine model and appearance was the general topic of conversation and all were loud in their praise of the new craft. Her lines are fine, indicating speed, and her carrying capacity has not been lost sight of in the construction. Her cost is about $175,000. That she will prove herself equal to the Hudson we have no doubt, and if she does she has no superior afloat on fresh water.

Everything went off successfully and satisfactory. The launch was delayed sometime waiting for friends from Detroit, and at 5:20 the word was given to let her go. She slid slowly and easily down the ways into the water amid the shouts of the large crowd who had assembled to witness her baptism and the congratulatory whistles of mills, tugs, and the steamer Hudson, which happened along on her voyage down, and was just abreast of the Harlem as she plunged off the ways into the water.

Among those present were a number of the officials of both the Dry Dock Co., and the Western Transit Co., who made their appearance on the scene at the "eleventh hour," having been brought from the city by Mr. H. Walker, aboard his elegant steam yacht "Pastime." She will be towed to Detroit, where her machinery will be put into her, and she will be fitted out ready for sea about August 15.

There have been no appointments made except for chief engineer, which position will be filled by Mr. Kennedy, of Chicago.

May good freights and fair weather attend the Harlem, and may she in all respects equal the expectations of builders and owners.

NOTICE TO MARINERS.

The Canadian deputy minister of marine has issued the following information for navigators of the Great Lakes.

A rocky bank has been discovered by Staff Commander Boulton, R. N., in the North Channel, District of Algoma, Ontario. It lies two miles east of the two low, flat islands which are situated five and one-half miles due north of Cape Robert. On the bank there are two spots with nine feet and thirteen feet water only.

The United States Lighthouse Board has given notice, that on or about the opening of navigation in 1888, a fixed red light of the fifth order would be shown from the lighthouse recently erected on Pipe Island, near the mouth of St. Mary's River, Michigan.

The apparatus will light 270 degrees of the horizon, and the focal plane is 37½ feet above the level of the river. The light should be seen in clear weather, from the deck of a vessel ten feet above the lake, 9¾ statute miles.

The structure is an octagonal tower of red brick, surmounted by a black lantern. A one-and-a-half story frame dwelling, painted white, stands about fifty feet from the tower.

The approximate position of the lighthouse taken from the lake survey charts, is as follows: Latitude, 46° 01′ 00″ north. Longitude, 83° 54′ 10″ west.

With Frying Pan Island light this light forms a range for entering and leaving the St. Mary's River. It also marks a turning point in the channel. Frying Pan Island bears S. ¼ E., magnetic, distant two statute miles.

The temporary light on the east pier at the entrance to Oakville Harbor, Lake Ontario, referred to in notices to mariners, Nos. 11 of 1886 and 36 of 1887, has been replaced by a permanent lighthouse, and the new light put into operation for the first time on the 4th inst. Latitude north 43° 26′ 40″, longitude, west 79° 40′ 20″. The light is fixed white, elevated thirty-nine feet above the level of the lake, and should be visible eleven miles from all points of approach. The illuminating apparatus is dioptric of the sixth order.

The lighthouse tower is a hexagonal wooden building painted white, surmounted by an iron lantern painted red.

The tower stands upon a cribwork block built up six and one-half feet above the level of the main pier; the height from base of the tower to the vane on the lantern is thirty-one feet. The center of the tower is thirty-one feet from the southern extremity of the pier, fourteen feet from its inner or western edge, and about 330 feet outside of the shore line.

July 21, or as soon thereafter as weather will admit painting, the hull of the lightship at the lower end of the Traverse, opposite St. Roch des Aulunais, River St. Lawrence below Quebec, will be colored red instead of white as at present with the words: "Lower Traverse" in white letters on each top side, and from the same date the vessel will show two fixed white or bright lights, one from each masthead, and in addition, a red light at a height of six feet above the bright light on the mainmast. The hull of the lightship at the upper end of the Traverse will remain red as heretofore, but the vessel will show only two white lights, one from each masthead; the red light maintained on her since the opening of navigation this year being removed to the lower vessel.

All bearings are magnetic and are given from seaward, miles are nautical miles, heights are above high water, and all depths are at mean low water.

Pilots, masters, or others interested are earnestly requested to send information of dangers, changes in aids to navigation, notices of new shoals or channels, errors in publications, or any other facts affecting the navigation of Canadian waters, to the Deputy Minister of Maine, Ottawa, Canada.

[*Around the Lakes Continued from 1st Page.*]

DULUTH.

The Herald says that the steamship Aurora, with the monster schooner David Dows in tow, made the run from the Sault canal in thirty-four hours, thus fully proving her claim to be the most powerful tow boat in fresh water. The Samuel Mather, considered a rather speedy vessel, left the canal five hours ahead of the Aurora, but arrived here behind her. The Northern Light made the run in thirty hours alone and she is expected to develop as great speed as any vessel on the lakes. Passenger vessels seldom make the run in less than thirty-six to forty hours.

Cedar tie receipts this season to date have been about 250,000, and about the same amount remains to come forward still. The Clinton, Grimsby, Lisgar and Emerald, now in port, will make two more trips, bringing up 30,000 to 35,000 ties each time. The May Durr and two schooners will also make two trips each, and other boats will bring up the rest. The four vessels as they came in, formed a pretty sight as they hauled in abreast like a four-in-hand. These ties, as has been stated, are for the Manitoba roads west, and the renovations of track, and the receipts of the year will lay nearly two hundred miles of track.

The delay at the St. Paul and Pacific coal docks at Connor's point is increasing. It will take some time before the blockade is broken.

The Herald says the new steamship Northern Light arrived in port and discharged her coal cargo. She is a trim looking craft and the finest of the many fine vessels seen in Duluth this season. Her gross tonnage is 2,476.35, net 1885.15 and was built at the Globe Iron Works Cleveland, for about $200,000. She is one of the finest and most symmetrical vessels ever turned out of a lake shipyard.

Captain Alex McDougall's "101," built by Robert Clark, is classed by Inland Lloyd's A1, and her value is put at $40,000. Her tonnage is 412 gross.

A 66 foot pleasure steamer has just been launched at Bayfield, the first boat ever built there. She will run on Chequamegon bay.

St. Lukes hospital has been awarded the contract of caring for sick and disabled seamen at Duluth for another year and Randall & Kendall will bury the dead from vessell contract having been awarded by the treasury department Saturday.

PORT HURON.

Two hundred men are employed on the burned steamer Arizona in the drydock at this place, and she will be in service as the City of Marquette in about a month. She will go into the coal and lumber trade on Lake Michigan.

Monday night about 10 o'clock the steambarge Brittanic bound down with the schooners Moonlight and J. I. Case become disabled abreast of the waterworks and let go the schooners which drifted down the river until abreast of Black river when they let go their anchors. In attempting to release them the Brittanic became foul of the Case disabling her.

John Fowler, the engineer of the steambarge Cowie turned up missing last fall while the boat was loading lumber at Alpena. His remains were found in the river at that place, on Tuesday last. The Argus in speaking of it says: "The remains were fearfully decomposed, the bones of the hand were partly devoid of flesh, the feet partly rotted away, the scalp gone, and on the remains were a blue shirt and a pair of pants. Coroner Partridge was notified and a jury sworn. An examination of the remains was made and three small keys and a button hook found. The jury were of the opinion that the remains were those of John Fowler, the second engineer of the propeller Cowie, who was drowned in the river last fall."

The steambarge Servia with the schooner Moravia in tow, burst the face of her steamchest when opposite here Monday morning. The following were scalded: R. Robertson, second engineer, badly scalded about the face, hands and feet; Joseph Thomas, fireman of Bay City, scalded about the face; John Wren of Corunna, Ont., fatally scalded, will not live through the day. He died from the effects of his injuries shortly after noon to-day. Robertson, the second engineer, and Joseph Thomas, fireman, are doing as well as could be expected.

WINDSOR.

Captain Harbottle, Dominion inspector of hulls, was in Windsor examining the new steamer Lakeside.

MT. CLEMENS.

Special to the Marine Record.

F. R. Buell is the name of the splendid steamship built by Captain Dulac for the Tonawanda Barge Line, for which the captain deserves great credit. She is of handsome model and good carrying capacity. The timber used in the construction of this steamer is of the best quality. The most of her machinery is placed, with all modern steamer improvements, including a Providence windlass. Her dimensions have been given heretofore. The facilities of the yard are second to none. No expense has been spared in the joiner department. The entire population turned out to witness the launch, which took place promptly on time Tuesday, and proved a complete success. McN.

SAULT STE MARIE.

The new steamer Soo City, named in honor of Sault Ste. Marie, and built by the Delta Transportation Company to run between the Soo, St. Ignace, Mackinaw City and Cheboygan arrived here on her first trip Monday evening the 2d ult. As she swung in gracefully, the committee, having in charge the presentation of the set of colors, jumped aboard, welcomed Captain Armstrong, Mr. W. R. Owen, the managing owner and his guests, and handed over the colors, agreeing to defer the ceremonial presentation until later in the evening. The Soo City can be properly described as a gem. Her length of keel is 170 feet and she measures 184 feet over all, with thirty-two feet beam and twelve feet depth of hold. She is solidly and compactly built, diagonally strapped with steel arches inside and out and beneath the deck, which secures a firmness that can be obtained in no other way. There are twenty-one staterooms, with sleeping accommodation for sixty-three people altogether. The engine is a fore and aft compound, 500 horse-power, capable of carrying 125 pounds of pressure. The shaft is fifty feet long. The boiler is made of steel, is ten feet in diameter and fifteen feet long. Hodge & Co., of Detroit, are the makers. The engine-room is well fitted up with all conveniences and is in charge of Thos. J. Rees, chief engineer. The Soo City was designed and built by F. W. Wheeler, of Bay City, and cost $90,000. She is considered by mariners to be as sound and staunch a craft as ever floated, and there are few boats of her size that are as elaborately fitted up. Her speed is said to be eighteen miles an hour. Coming up she made fourteen and one-half miles an hour.

The depth of water at Portage Lake canal is about one foot greater than it has usually been and more boats are therefore returning eastward through Portage Lake instead of around Keweenaw point. Last year only two boats of the Transit company went through Portage Lake. At present five return that way, and all of them would use the canal route if the water at the canals was still deeper.

ERIE.

Bids were opened Tuesday at Buffalo for the government work on the Peninsula at Erie this year. The work bid upon was 6,000 feet of piling on the weather beach of the Peninsula. The piling is to set 100 feet out from the water's edge in water ranging from five to six feet in depth. On this piling will be a course of sheet piling, and on the inside will be a brush mattress twenty feet in width and which will be weighted down with stone. Arms will extend in from each end of the work to the shore. The government has appropriated $53,000 for the work. The lowest bidders at Buffalo; for the iron work were Oliver Bros. & Phillips for the other material and labor John L. Johnson of Fulton, Oswego County, N. Y. There were fully forty bidders for the work. Other work is contemplated for this port in the way of extensions of piers and dredging the channel.

Engineer Quintus made observations recently for azimuth, and located his transit on the bluff of the bay. The meridien was taken when the pole star was at its eastern elongation at 12:54 4-10 o'clock Tuesday morning. The deviation of local transits from the true meridien is very great here on account of local causes. In fact the tug masters have been obliged at times when the weather was thick and they were compelled to rely upon their compasses, to abandon all attempts to enter the harbor for the reason that the compass behaved so badly that it could not be relied upon. It is said that a load of ore was sunk at one time in the harbor. If this be true that would account for the behavior of the needle on the bay.

The barge Nelson which went aground in the channel Thursday, was pulled off Friday evening. The change in the wind raised the water in the bay although it is still a foot below the regular stage this season.

The exciting event on the bay this evening was the drowning of William Thomas, a fisherman, in plain sight of over two hundred people. Thomas was sailing a boat down the bay from the head with a little girl for a passenger. He fell overboard while trying to recover his hat, and the boat ran away from him. He swam towards the shore and becoming exhausted sank and drowned in six feet of water. The drowned man was thirty-three years of age and was the support of a mother and three sisters. A passing barge lowered a boat and tried to save Mr. Thomas but the plug being out of the bottom, the boat swamped. The occupants were saved however.

PORT COLBORNE.

The wrecking tug McArthur arrived here last Thursday. She is waiting for weather before commencing to wreck the barge Oriental that was sunk off here last fall. The tug John Hunter arrived to go on dock for repairs.

BUFFALO.

At a meeting at the merchants' exchange Monday pursuant to a call made on Saturday, resolutions were adopted as follows: "That the demurrage clause in the present bill of lading is unsatisfactory to carriers for the reason that many changes have been made in tolls, elevator rates, etc., since its adoption; that the chair appoint a committee of six (three forwarders and three shippers) to consider if any alteration in the demurrage clause of the present canal bill of lading is needed, and if needed, to make the necessary alteration and submit it to this exchange for its approval at as early a day as possible." The chair appointed to this committee Messrs. Niles Case, Harris Fosbinder, and Adam Homer, forwarders; and William Meadows, C. A. Warfield, and E. W. Eames, shippers.

The tug Edward Fiske, owned by James Ash and others, was sold Monday to Lay Bros, of Sandusky, who bought the tug Buffalo some time ago, for $8,500. She will be used in the fish trade. The Fiske was built here in 1883 and has since run in Hand's line, where she has proved so serviceable as to become a general favorite and everybody will be sorry to see her leave the harbor. The new tug for the line to take the place of the Griffin, which was sold last spring, will be out in a month or so.

The propeller A. P. Wright overran three bushels on her cargo of 93,000 bushels of corn.

The Leuty tow goes through the Welland this trip with its lumber, leaving only the Montgomery for Tonawanda.

The schooner Genoa went into drydock Monday for a thorough calking and the George Nester was also booked for repairs.

About as fine a showing of new vessel work as is often seen in contrast was the E. P. Wilbur unloading Monday at the Benedict elevator and the Northern Light across at the Watson.

L. B. Presley agent Summit Hill Coal Co., of Cleveland, writes I am very much pleased with the Trout wheel and think it the best in the market.

Deputy United States Marshall Kranz libelled the Canadian steambarge A. H. Jennie on complaint of H. C. Springer & Co., to whom she owes $30 for fuel from last season. The claim was settled.

The propeller Starucca went into the Union Drydock to repair the damage sustained in going ashore at Duluth. The propeller Lothair was also in dock.

Captain Dobbins is finishing a new metallic ship lifeboat, self-righting and self-bailing, for Congressman W. L. Scott's yatcht Mystic at Erie.

Coal freights were quiet. Shippers are not greatly pressed for tonnage and do not care to charter boats to be held over the holiday. The list includes the propellers Tacoma and T. W. Palmer for Chicago and propeller J. C. Pringle for Racine at $1; the Escanaba for Milwaukee, schooners Sweatheart for Manatowoc and F. B. Gardner for Sheboygan at 90 cents; barges Reindeer and L. P. Betts for Saginaw at 50 cents; barge E. J. McVea for Bay City at 40 cents.

Canal freights were without change. Wheat was quotable at 2¼ cents, corn at 2 cents, and oats at 1⅛ cents to New York. Boats were generally asking more.

ASHTABULA HARBOR.

Special to the Marine Record.

Everything at this port is swinging on an even keel in fact the tenor is rather to even for the well being of the reporter. Just the scarcity of items is what causes the poor ragpicker to soar off into space and seize upon a conglomerate map of improbabilities which is thrown to the public. If satisfaction is given then comes the reward. What is it, do you ask? Why, the reward that awaits the weary pilgrim is a skewer and red herring, and so mote it be; for this we are thankful.

Propeller Forest City, loads coal for Marquette. Propeller Kittie M. Forbes, coal for Duluth and calls at Cleveland for Mable Wilson. Steamer Louisiana, loads coal for Connors Point. Steamer Germanic, loads coal for Duluth and is putting in new hawse chocks forward. Propeller Vienna, takes coal to Lake Linden.

The artists are alongside of the Sparta, putting on a background of black. Schooner Sumatra, is having her midships hatch enlarged that it may be used in unloading.

The A. & P. dredge Hercules, is at work cleaning the channel alongside of 200 feet extension built last winter on A. & P. river front.

The propeller Nelson Mills, comes from Dunkirk; she and her consorts load coal for Lake Linden.

The dock engineers all walked out Tuesday morning and demanded that the old rate of 50c per hour for overtime be restored, as they were cut this spring to 35c. The stop was brief and they feel that their request will be granted.

Steamer Escanaba is getting some needed repairs at Devney's yard. F. L. T.

RODNEY.

The schooner E. Blake, which ran ashore Wednesday night, the 27th ult., is uninjured. The tug W. A. Routh, of Port Colborne has arrived, and will have the vessel off in two or three hours and she will continue her voyage to Detroit under sail. Mr. F. St. John, of St. Catharines, owner of the Blake, arrived here to look after her damages.

DETROIT.

The Grand Trunk Company's boat, the Great Western, left her slip for Windsor about 10:30 o'clock Sunday night. When nearing the Canada side Captain Masonville noticed a large steam barge with consort, which proved to be the Roumania and schooner George. He endeavored to cross ahead of the barge, but as he approached her course, he saw he was likely to get uncomfortably near and accordingly blew the whistle. Signals were exchanged but through a misunderstanding both boats kept on their course, and not until a collision was unavoidable was the danger apparent. The Great Western ran across the bow of the barge and the latter crushed into the car ferry's starboard bulwark, just aft of the wheel, with a noise that was heard a mile away. The mate's room was wrecked, the steam pipes in it being twisted like wires, and driven through the heavy partitions, and a deck hand who was in the lamp room, aft of the mate's quarters, was pitched half way across the boat, but escaped with a few slight bruises. The barge cut entirely through the ferry's hull. The latter swung around and the barge tore loose from the ferry and continued on up the river. The ferry drifted three hundred feet before she could be brought under way. The damages did not extend below the deck, so there was no danger after the barge broke away, but the crew, the customs officers, and the few trainmen were badly freightened for a few minutes, expecting momentarily to see the barge go to the bottom.

A few minutes before the collision of the Great Western and the Roumania, the big iron tug Westover, bound down, carrying two headlights, collided with the steamer Atlantic, bound up. Signals were misunderstood. A large hole was punched in the Westover, and when she reached the dock she was leaking badly. The railing just above the high water-mark was bent and twisted, and the sheeting was doubled up as though it was so much paper. She took out twenty five tons of coal at the dock, and by means of steam pumps the water in her hold was pumped out, and she proceeded on her way down for Cleveland.

ST. CLAIR.

The Fontana was successfully launched Saturday at Langell's shipyard, St. Clair. She will be a consort to the steamer Kaliyuga, she is owned by the St. Clair Steamship Co., and cost $75,000. Length over all, 250 feet, 40 feet beam, moulded depth, 23½ feet, and built with a view to putting machinery in her in future. She is substantially and handsomely built, and with the steamer Kaliyuga will be among the handsomest and best pair of wooden vessels on fresh waters.

PORT BURWELL.

On Friday, June 12th, the schooner Alzora, owned by Captain Peter Haggblom, left this port for a point seven or eight miles below here to load cordwood, and during a gale in the night her anchor chain parted, and the vessel was driven ashore. She was hauled off and returned here, and was found to have sustained very little injury. The steamer Loretta Englesbee, of Erie, Pa., which makes tri-weekly trips to this place, was weather bound here for several hours after it had taken on its usual cargo of fish.

TOBERMORY.

A steam scow with ties in tow for Stoke's Bay broke her endless chain off Pine Tree Point, Lake Huron. There being no anchorage and a strong off land wind, she drifted into the lake till ten miles abreast of Cape Hurd, where the fishing tug Chambers, of this port sighted her in a sinking condition and took off her crew. The Chambers attempted to tow her in, but she immediately swamped in the heavy sea and turned bottom up, losing her boiler and engine and a quantity of mill machinery. She was abandoned, and is still adrift with her raft, making towards the American shore.

Captain Cornwall, late of the schooner Clara Youell, having bought an interest in the schooner Herbert Dudley, has decided to take charge of her and will henceforth sail her as captain, in the place of Captain Casey the late master of the Youell. Captain Troy, who commanded the schooner Maggie McRae when she was lost in Lake Superior, is to succeed Captain Cornwall on the Clara Youell.

Captain A. F. Holmes, of Napanee will be appointed to the command of the new government vessel, the "Cruiser," which is to be stationed on the Georgian Bay. The vessel is jointly purchased by the fisheries and custom departments, and will be used as much as a revenue cutter as much as for the protection against illegal fishing.

Captain Rumsey P. Brown died yesterday aged 71. He was one of the oldest of lake navigators. His last sailing was on the barge Colonel Brackett.

U. S. Engineer Office,
Cleveland, O., June 26, 1888.

NOTICE is hereby given to owners and all other parties concerned in any manner with the schooner "Joy," or her cargo, now sunk in and obstructing the channel at entrance to Ashtabula Harbor, Ohio, that they must remove said schooner and cargo from the channel; and that if the same is not removed within a reasonable time it is the purpose of the Honorable the Secretary of War to treat said wreck as abandoned and derelict, and cause it to be removed in the manner prescribed by Section 4 of the Act of Congress approved June 14, 1880.

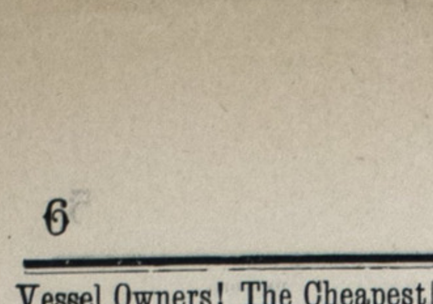
L. COOPER OVERMAN,
Major of Engineers.

Vessel Owners! The Cheapest Bedding Supplies!

Are furnished as, *Comfortables, Blankets Table linens, Towels,* etc., as well as *Sheets, Pillow-cases,* are *sewed to order,* at shortest notice. For 20 per cent less than big extensive establishments are accustomed to charge. Owing to the extreme small expenses of the Boston Dry Goods Store of Kohn & Co., 213 Detroit st., second door from corner Pearl it is *them only* who save 20 per cent unnecessary taxes. Give a trial order to KOHN & CO., 213 Detroit st., second door from corner of Pearl, Cleveland O.

WILLIAMSON BROS.

COR. RICHMOND AND YORK STS.,
PHILADELPHIA, PA.



HOISTING ENGINES AND SHIP STEERING ENgines; with either Frictional, Spur or Worm Gear of various patterns to suit all purposes.

LAWRENCE, OSTROM & CO.'S

Famous "Belle of Bourbon"

IS DEATH TO
MALARIA; CHILLS AND FEVER,
TYPHOID FEVER. INDIGESTION
DYSPEPSIA, SURGICAL FEVER.
BLOOD POISONING. CONSUMPTION
SLEEPLESSNESS OR INSOMNIA
AND NON-ASSIMILATION OF FOOD.
TEN YEARS OLD.

IN PRODUCING OUR "BELLE OF BOURBON" WE USE ONLY THE FLINTY OR HOMINY PART OF THE GRAIN THUS FREEING IT OF FUSEL OIL BEFORE IT IS DISTILLED
Lawrence, Ostrom & Co. Louisville, Ky.

ABSOLUTELY PURE. NO FUSIL OIL. THE GREAT APPETISER.

For Sale by JOHN SCHLITZ, 120 Superior
THOMAS CHARLTON, 129 Superior st
Cleveland, O., and Druggists, Wine Merchants & Grocers Everywhere.
LAWRENCE, OSTROM & CO. Louisville, Ky

SAMUEL McCUTCHEON,

STEAMBOAT & ENGINEERS' SUPPLIES
Copper, Brass and Sheet Iron Manufactory.
IRON PIPE AND FITTINGS.
Agent for Davidson's Steam Pumps, Amazon Boiler Compound, and Orme Patent Safety and Relief Valve.
No. 18 Ohio Street,
Buffalo, N. Y.

The Colbourn House,

(FORMERLY THE STANDISH HOUSE.)
Capt. H. L. Brown & Son, Prop's
11 to 17 E. Congress St. Detroit, Mich.

Centrally located, one block from City Hall, and convenient to street cars running to all points of shipping up and down the river.
Has been thoroughly refurnished and renovated. Rates, $1.50 to $2 00 per day. Special rates to steamboat and vesselmen, whose patronage is especially solicited.

Scott's New Coast Pilot

Second Edition, Revised and Enlarged,
With new Maps and Illustrations corrected to the opening of Navigation in 1888,
IS SOLD BY
SHIP CHANDLERS
AND BY THE PUBLISHER.
GEORGE SCOTT,
AT 162 LARNED ST., E. DETROIT, MICH.

M. M. GLEKLER,

MANUFACTURER & DEALER IN
Cigars
AND
Tobacco.
156 River-st., Cleveland, Ohio.
No one should leave port without a box of M. M. Glekler's marine cigars.

IRA B. BASSETT. GEORGE PRESLEY, Jr. A. R. TRAIN.

BASSETT, PRESLEY & TRAIN,

Manufacturers and Wholesale Jobbers of

Bar, Bridge and Car Iron,
Hoops, Bands and Sheet Iron,
Boiler, Bridge and Tank Plates,
Nails, Ship and Railroad Spikes

STEEL BOILER AND SHIP PLATES, ANGLES, BEAMS, CHANNEL AND T IRON.
BOILER TUBES, BOILER, TANK AND COOPER RIVETS,

We also Represent in this Market the Following Well-known Manufacturers:

Sanderson Bros. Steel Co,
CAST STEEL.

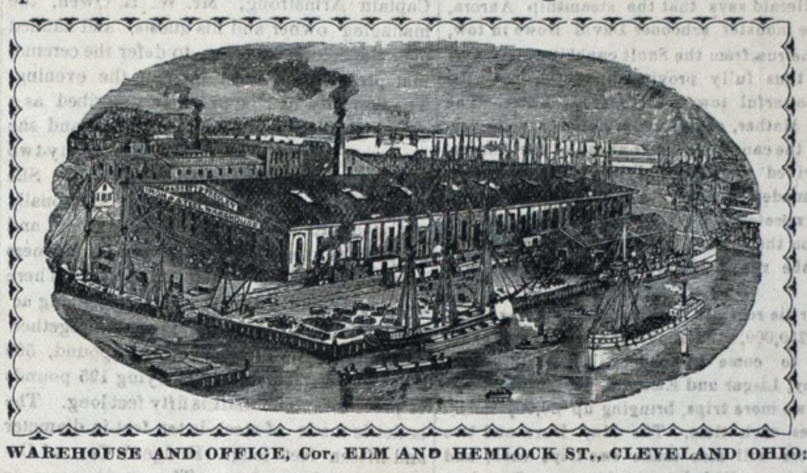
Joseph Corns & Son.
CROWN STAY BOLT IRON.

Pencoyd Iron Works,
ANGLE IRON.

Dilworth, Porter & Co.,
RAILROAD AND BOAT SPIKE.

Spang Steel & Iron Co.,
BOILER AND SHIP PLATES.

Spaulding Iron Co.
STEEL NAILS.



WAREHOUSE AND OFFICE, Cor. ELM AND HEMLOCK ST., CLEVELAND OHIO.

Andrews Bros. & Co.,
BAR IRON.

Reading Iron Works.,
BOILER TUBES.

Central Iron Works
BOILER PLATES.

George W. Johnson,
TANK AND SHEET IRON.

Falls Rivet Co.,
TANK AND COOPER RIVETS.

Lindsay & McCutcheon,
HOOP AND BAND IRON.

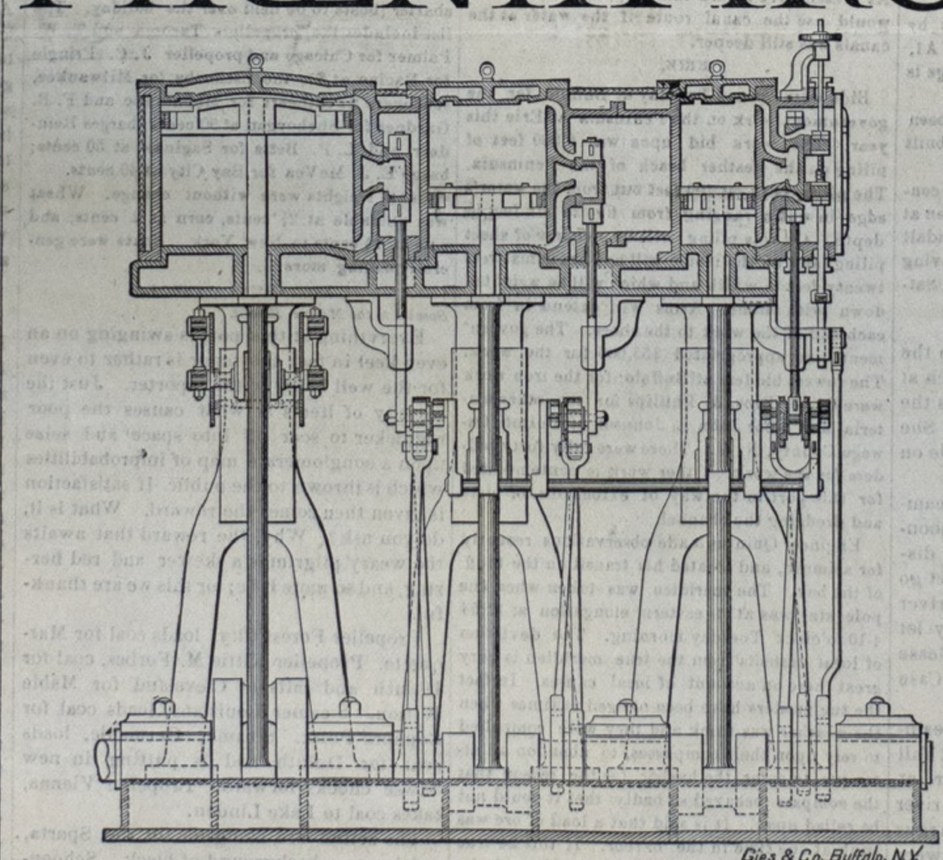
BURDEN IRON COMP'Y BOILER RIVETS.

We Always Carry a Full Stock of Goods in Our Line.
All Correspondence and Telegrams Answered Promptly.

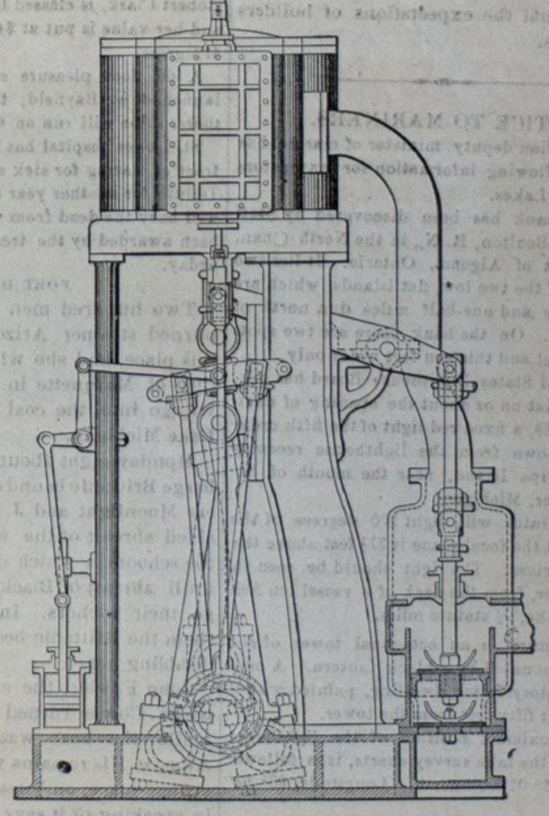
Our Correspondents will please note that the Western Union Telegraph Co.'s Wires are connected with our office, and much time will be saved in the transmissio and delivery of messages to us if sent via that Company.

WE SOLICIT YOUR TRADE.

PHŒNIX IRON WORKS.



Gies & Co., Buffalo, N.Y.



Manufacturers of

STEEPLE FORE AND AFT COMPOUND, AND TRIPLE EXPANSION MARINE ENGINES, WITH BOILERS OF MODERN DESIGN.

PORT HURON, MICH.

ED. J. KENDALL.

The Marine Reporter.

Collections Made and Prompt Remittance, Orders Promptly Delivered with Small Boat Day or Night—Reference Port Huron Savings Bank,
PORT HURON, - - - MICH.

JOHN THOMSON,

Steam Fitter and Machinist,
DEALER IN
ENGINEERS' SUPPLIES.
Sole agent for Cleveland for the Giant Red Valve.
Mead & Thomson's Feed Water Purifier.
Agent for Lubricating Oils. Agent for the Capital and Medal Cylinder Oils.
123 River Street, Cleveland, O.
Telephone 77.

MARINE REPORTER AT THE STRAITS.
Reports of Passing Vessels a Specialty.
Messages Delivered to Passing Vessels Day or Night, Weather Permitting.
MY ICE REPORTS MAY BE RELIED ON.
SEVENTEEN YEARS EXPERIENCE.
The Patronage of the Marine Public Respectfully Requested--Charges Reasonable.
F. J. STIMPSON, MACKINAW CITY MICH

ROBERT E. HILLS,

57 & 59 North Wells St., Chicago, Ill.
Telephone 3321.
STEAM FITTING AND HEATING,
Wrought Iron Pipe & Fittings
ENGINEER'S SUPPLIES.
General Jobbing Work Done Promptly.
Also, Proprietor of North Side Brass Works.

The Only Shirt Factory in the City

Where all kinds of *Flannel Shirts*, Navy-blue, double and single-breasted *Sailor Shirts*, *Waterproof Shirts*, *Cheviot Shirts*, made in a *regular home made style*, every shirt 54 in. wide, 40 in. long, wide sleeves, extra well sewed, can be found at the Boston Dry Goods Store, 213 Detroit street, second door from corner Pearl streets. Also ☞ *Our own home-made Jean Pants, Overalls, Jumpers*, etc., and all of above will be made ☞ *to order* ☜ if the customer desires it, for the same price as sold ready-made.

Don't forget to call on KOHN & CO., 21 Detroit St., near corner Pearl, Cleveland O.

C. J. STARKEY,

Grocery & Provision Store.

Special Attention Given to Vessel Supplies.

FAIRPORT. O

A. S. DeVries,

SHIP AND ORNAMENTAL PAINTER

22 South Water street, Cleveland, O.

Established in 1871. Telephone 210.

Signs, Steering Balls, Liberty Caps, Ornamental Work a Specialty in Cabins.

A. J. MORSE & SON.

140 CONGRESS ST. BOSTON.

GEORGE SAAL'S SON.

Copper-smithing of all Kinds.

VESSEL WORK A SPECIALTY.

403 and 405 Detroit-st., corner Duane-st.. Telephone 1638. CLEVELAND, O.

River Machine Co.,

[Successor to G. R. GALE,]

171 River St., Cleveland, Ohio,

Are prepared to Manufacture and do General Repairing on Marine Engines and all other Machine Work.

We have also a full line of pulleys and shafting and are prepared to do all kinds of Stone quarry Work.

TEARE, WIGHT & CO.

WINDLASS FOR SALE.

The undersigned have a Hadfield Patent windlass or a one and three-eighths inch bar chain for sale cheap.

JOHNSON & BATES,
927 Erie St., Racine, Wis.

WARD AND JACKSON,

Shipsmith.

All Kind of Forgings, Bolts and Truss Rods for Building.

49 Main-st Cleveland

GEORGE E. HALLADAY.

Attorney and Proctor in Admiralty.

Marine Business Promptly Attended To.

OFFICE 21 BUHL BLOCK, DETROIT, MICHIGAN.

BEESON'S SAILOR'S HAND BOOK,

And Synopsis of Marine Laws. Every vessel man wants one. For sale by marine clerk at all custom houses. Price 50c. See it.

Lake Shore & Michigan Southern.

Commencing Sunday May 13, 1888. The time given in the figures below is the new standard (Ninetieth meridian) time, which is thirty-three minutes slower than Cleveland time proper.

Eastward.	Arrive	Depart.
No 4, Fast Limited Express	*2 55 A M	*2 55 A M
No. 6 N. Y. & Boston Ex	*1 35 A M	*1 40 A M
No 8, N. Y. B & A Express	*8 25 A M	*8 50 A M
No 26, Elyria Accommodation	†7 45 A M	.....
No 24, Buffalo Ac'm via Sandusky	†10 05 A M	†10 15 A M
No 24, Toledo Accom via Norwark	†10 05 A M	†10 15 A M
No. 10, New York & Boston, "Flyer"	.....	*11 50 A M
No 12, N Y & B Fast Express	*2 35 P M	3* 45 P M
No 2, Night Ex via Norwalk	9 40 P M	†10 00 P M
No 22, Night Ex via Sandusky	†9 40 P M	.....
No 26, Conneaut Accommodation	†4 25 P M	.....

Westward.	Arrive.	Depart.
No 1, Fast Limited Express	*12 15 A M	*12 15 A M
No. 23, Cleveland Express	*2 15 A M	
No 3, Chicago Express via " "	§5 30 A M	5 45 A M
No 25, Mich Accom Norwalk	.....	†5 45 A M
No 21, Toledo Ex via Norwalk	†12 50 P M	†3 20 P M
No 5, St Louis Ex via Sandusky	*10 50 A M	*10 55 A M
No 9, Chi Pac Ex via Norwalk	•6 55 P M	*7 15 P M
No 31, Elyria ac to Elyria only	.....	†4 30 P M
No 27, Conneaut Accommodation	†8 10 A M	.....

Sunday train for Nottingham—Depart 9:20 a. m. and 1:00 p. m.; returning, arrive at 9:20 a. m. and 4:45 p. m.

Reference marks—* Daily, † daily, except Sunday, § daily, except Monday.

A local Cleveland and New York sleeper, also sleeper for Boston, and dining car daily on No. 10, leaving Cleveland at 11 50 A M.; arrive Grand Central depot, New York, 7.30 a. m.

For full information as to trains and connections apply at the Union ticket office, corner Bank and Superior streets, under Mercantile Bank.

M. E. GAUL, City Passenger Agent.
A. J. SMITH, Gen'l Pass. Agt., Lake Shore Block.

SAMUEL F. HODGE & CO.,

MANUFACTURERS OF

MARINE,

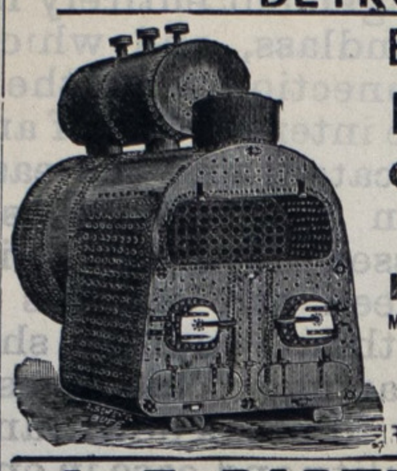
Stationary & Portable Engines,

MINING MACHINERY AND

PROPELLER WHEELS,

Riverside Iron Works, 314 to 326 Atwater Street,

DETROIT, MICH.



EAGLE BOILER WORKS,

M. RITER, Prop'r,

Cor. Indiana & Mary St.,

BUFFALO, N. Y.

MANUFACTURER OF

High and Low Pressure

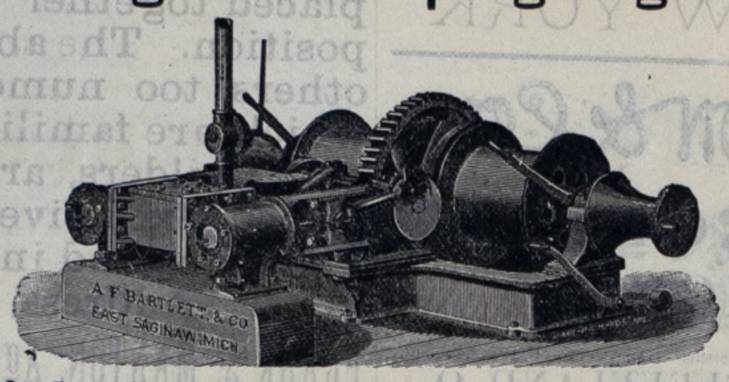
Marine, Stationary, Portable, Locomotive and Upright Boilers; also, Salt Pans, Smoke Pipes and Heavy and Light Plate Iron Work of all Descriptions.

REPAIRS PROMPTLY ATTENDED TO.

A. F. BARTLETT & CO.'S

COMBINED

Hoisting and Pumping Engines.



Used for Deck Hoists, Coal and Iron Mines, Log Loading, Hoisting Sail, Loading and Unloading Coal Barges, and Other Purposes.

USED ON

Steamers Roumania, Bulgaria, Oceanica and Others.

SEND FOR CIRCULARS AND PRICES.

A. F. BARTLETT & CO., East Saginaw Mich,

BOSTON & LOCKPORT BLOCK CO.,

SUCCESSORS TO BAGNALL & LOUD BLOCK CO. and PENFIELD BLOCK CO.

BOSTON, MASS., and LOCKPORT, N W YORK.,

The Largest and Most Reliable Manufacturers in the United States of

TACKLE BLOCKS.

Their Specialties are: Self-Lubricating Metaline Blocks: Self-locking Link Snatch Blocks: Self-adjustable Five Roll Roller Bush Blocks; Loud's Patent Non-chokable Diaphragm Pumps will pump Sand, Gravel, etc., without injury to the Pump, having no plunger. Easiest Working Pump in the Market

OUTFITS FOR VESSELS A SPECIALTY.

We make the most durable grade of Blocks to be obtained in the market. Call for our SELF ADJUSTABLE FIVE ROLL ROLLER BUSHED STAR BRAND BLOCKS AND DO AWAY WITH REPAIRS.

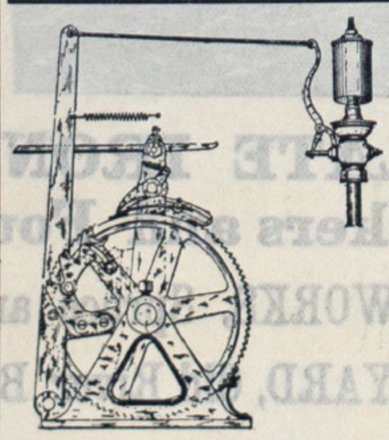
ARTHUR & BOYLAN,

Steamboats, Tugs, etc, Coaled Day and Night.

DEALERS IN LACKAWANNA ANTHRACITE COAL.

Woks: Ft. West River St., Whisky Island, C. P. R'y. Slip, Government Pier

OFFICE 130 RIVER-ST., CLEVELAND, OHIO.



Chase Fog Whistle Machine.

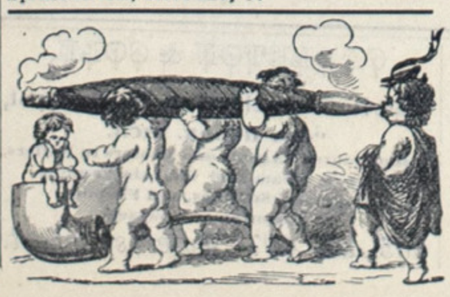
This machine has been placed on the following steamboats during the past year: SPOKANE, WALLULA, KASOTA, CHARLEMAGNE TOWER, JR, YAKIMA, MISSOULA, SITKA, FAYETTE BROWN, R. J. HACKETT, FOREST CITY, SPARTA, HAVANA, VIENNA, OSCAR TOWNSEND, CITY OF CLEVELAND, HENRY CHISHOLM, SUPERIOR, E. B. HALE, M. B. GROVER, J. S FAY, R. P. HANNEY, SMITH MOORE, CHARLES J SHEFFIELD, IRA H. OWEN, CAMBRIA, CORSICA, J. H. OUTHWAITE, SAMUEL MATHER, R. R. RHODES, COLUMBIA, AURORA, OHIO, WM. EDWARDS, S. E. SHELDON, AUSTRALASIA, RALEIGH, BULGARIA, ROUMANIA, J. F. EDDY, HIAWATHA, THOS. ADAMS, A. P. WRIGHT, GLADSTONE, E. P. WILBUR, SOO CITY, E. M. PECK, ROBERT L. FREYER AND NORTHERN LIGHT,

To the President and Board of Supervising Inspectors of Steam Vessels:

Your committee to which was referred the 'Chase Fog Whistle Machine" beg leave to report: "That we have carefully examined the same and find that it blows at regular intervals, being worked by the engine, thereby insuring regular and continuous blasts for any length of time that may be required and would recommend it or similar device to owners of steam vessels as an additional safeguard to navigation.

H. S. LUBBOCK,
GEO. H. STARBUCK,
W. D. ROBINSON,
} Committee.

The manufacturers are the Chase Fog Whistle Machine Co., corner of Elm and Spruce streets, Cleveland, O.



Forest City CIGAR STORE

THOMAS LIGGET, Prop'r.

MAMTFACTURER AND JOBRER OF

CIGARS AND TOBACCOS.

259 PEARL STREET

TOLEDO, OHIO. MONTPELIER, OHIO. OAR MILLS. NEPTUNE ANCHOR WORKS.

DEGRAUW, AYMAR & CO.,

MANUFACTURERS AND IMPORTERS OF

CORDAGE, OAKUM, WIRE ROPE, CHAINS, ANCHORS, OARS, BLOCKS COTTON AND FLAX DUCKS, FLAGS BUNTINGS, RUSSIA BOLT ROPE,

MARINE HARDWARE AND SHIP-CHANDLERS' GOODS GENERALLY.

Nos. 34 AND 35 SOUTH STREET, NEW YORK.

TESTED CHAINS.

Bradlee & Co., Empire Chain Works

BEACH AND OTIS STS., Philadelphia.

Ship's Cables and Marine Railway Chains.

Chains for Foundry Cranes and Slings.

"D. B. C." Special Crane Chains.

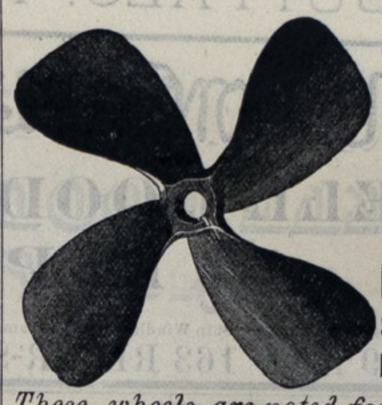
Steel and Iron Dredging, Slope and Mining Chains.

H. G. TROUT,

KING IRON WORKS,

BUFFALO, N. Y.,

MANUFACTURER OF



Triple Expansion Marine Engines, Three Cylinder and Fore and Aft and Steeple Compound Marine Engines,

High and Low Pressure Engines,

SECTIONAL PROPELLER WHEELS,

PROPELLER, TUG & YACHT WHEELS

These wheels are noted for their extra speed and towing power, or a proportionate saving of coal.

PRICES QUOTED ON APPLICATION.

WILLARD & FILLEY,

[SUCCESSORS TO R. L. WILLARD]

SHIP AND ORNAMENTAL PAINTING.

DEALERS IN

LEAD, OIL, MIXED PAINTS, GLASS, PUTTY, ETC.

All Kinds of Steamboat and Vessel Work a Specialty.

Finished Liberty Caps, and Gilt Balls for Mast Heads and Flag Staffs Always on Hand.

57 Main Sreet, cor. Elm, Cleveland, Ohio.

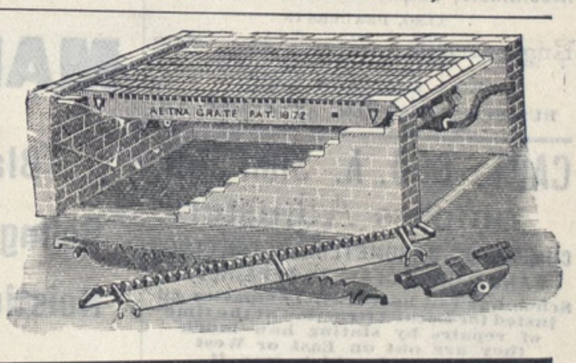
THE ÆTNA GRATE.

G. C. BARNES, Agt.

This Improved Shaking Grate Especially Adapted to Burning Slack.

Glob Iron Works, manufac's.,

Office and Foundry, corner of Elm and Spruce-sts., CLEVELAND, O.



THOS. DREIN & SON

BUILDERS OF

METALLIC LIFE BOATS

and LIFE RAFTS of all classes Government and Pleasure Boats of Wood. Block Cork Life Preservers. Sole manufacturer of Capt. JONATHAN CONE'S celebrated

Patent Life Rafts

cor Tatnal and Railroad Wimington, De

MONTAGUE IRON WORKS,

Montague, Mich.,

MANUFACTURERS OF

MARINE AND STATIONARY ENGINES AND BOILERS,

Of Every Style and Size,

PROPELLER WHEELS and Heavy Castings

A Specialty. Send for Circular and Prices.

HOWARD H. BAKER & CO.

Ship Chandlers & Sail Makers

WHOLESALE AND RETAIL DEALERS IN

Cordage, Wire-rope, Blocks Canvas, Anchors, Chains, Paints, Oils, Naval Stores.

Cylinder, Lard, Signal and Lubricating Oils a Specialty.

AGENTS FOR THE

American Ship Windlass Company for Lakes Erie and Ontario.

Importers of Nautical Instruments of Every Description.

18, 20, 22, 24, & 26 Terrace.

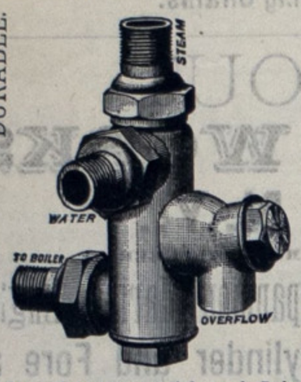
BRANCH STORE foot of Washington street (formerly D. S. Austin & Co.)

Buffalo, N. Y.

PENBERTHY'S IMPROVED

Automatic Injectors,

FOR STATIONARY, MARINE, PORTABLE AND LOCOMOTIVE BOILERS.



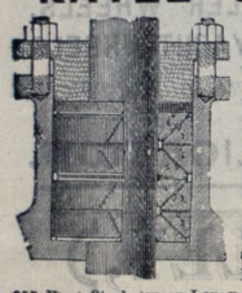
SIMPLE, RELIABLE, DURABLE. RANGE 25 TO 135. WILL LIFT 20 FEET.

A Written Guarantee with each Injector.

C. H. PRESLEY & CO.,

24 S. WATER St., Telephone No. 2383, CLEVELAND, O.

KATZE STEIN'S



SELF-ACTING METAL PACKING FOR PISTON RODS, VALVE STEMS, Etc.

Adopted and in use by the principal Iron Works and Steamship Companies within the last eight years in this and Foreign countries. Also flexible tubular metallic packing for slip-joints on steam pipes and for hydraulic pressure. For full particulars and references address

L KATZENSTEIN & CO

357 West St., between Leroy and Clarkson-st, N. Y.

CAPT. THOS. WILSON, who uses this packing on his Steamers, and THE MARINE RECORD are Agents for Cleveland and the Lakes.

McKINNON BROS.

Ashtabula Harbor, O.,

Machinists, Shipsmiths & Steamfitters;

ALSO, DEALERS IN

Engineers' Supplies, Lubricating and Burning Oils.

BUSINESS PROMPTLY ATTENDED TO.

CAPT. GEO. A. SIMPSON,

Compass Adjuster,

COMPASSES, BAROMETERS, PATENT LOGS AND MARINE GLASSES REPAIRED,

Schooners can have their Compasses Adjusted for Local Attraction at the time of repairs by stating how much they are out on East or West Courses, and which way it leads, North or South of above Courses

161 River St., Cleveland, O.

JOHN P. DEVNEY,

Marine Collector.

Collections Promptly Attended to.

ASHTABULA HARBOR, OHIO.

DETROIT & CLEVELAND

Steam Navigation Co.,

[Office, on wharf, 23 River Street.]

BETWEEN

CLEVELAND & DETROIT,

MACKINAC ISLAND, ST. IGNACE, ALPENA, SAND BEACH, PORT HURON, CHEBOYGAN, HARRISVILLE, OSCODA, ST. CLAIR, OAKLAND HOUSE AND MARINE CITY.

Special Sunday Trips

BETWEEN CLEVELAND AND DETROIT DURING SUMMER MONTHS.

For full information, rates, tickets etc, apply to E. B. WHITCOMB, Gen Pas'gr Agt. Detroit, Mich. T. F. NEWMAN, Gen. Agt. Cleveland, O.

Travelers' Information Bureau,

224 Bank St, Cleveland, O.

Where may be found a full line of Ocean Tickets.

ESTABLISHED 1847

Thomas Quayle's Sons,

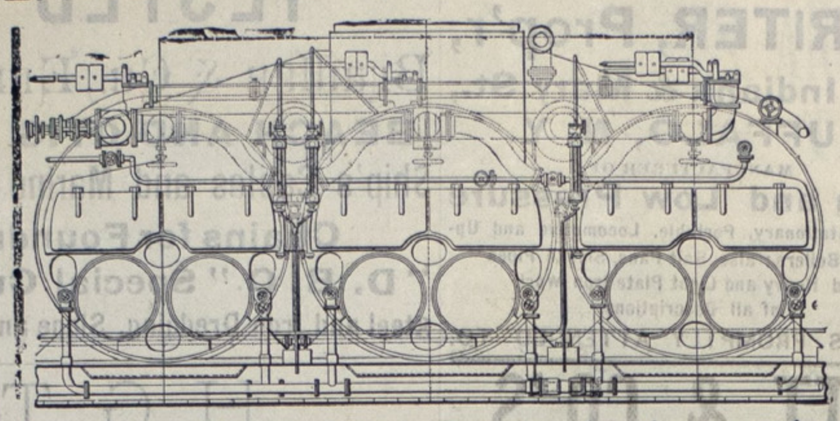
OFFICE & WORKS CENTRAL WAY

SHIP BUILDERS,

Thos. E. Quayle,
George L. Quayle,
Wm. H. Quayle.

Cleveland, O.

LAKE ERIE BOILER WORKS.



The best equipped plant in America for the manufacture of Modern Marine Boilers.

BUFFALO. NEW YORK

URSON, WALTON & CO.

SELL GOOD ROPE AT FAIR PRICES

Agents for the American Ship Windlass Co., Williamson Bros. Steam Steerer, Drein Metallic Life Boats.

159 AND 163 RIVER-St., CLEVELAND, O.

Established in 1857.

AMERICAN SHIP WINDLASS CO.,

Builders of Steam, Messenger Chain and Hand Windlasses, Power, Crank and Steam Capstans, Wharf and Ferry Drops. Their Capstan Windlasses have a Power Capstan with a single head which has power and speed arrangement entirely independent of th Windlass, and which makes a direct connection with the Windlass without the intervention of any gearing to complicate it and inc ease the friction.

In all their styles of Steam Windlasses they make a direct connection between the engines and the windlass without counter shafts or dditional gearing. This saves friction and liability to break down, and conduces to durability and ease in operating. They also have a counterbalance for the engines and an automatic lubricator for worm and worm gear, and the engines are placed together in the most accessible position. The above improvements and others too numerous to mention, but which are familiar to Masters, Owners and Builders, are covered by Patents owned exclusively by this Company. For plans and information

Address,

FRANK S. MANTON, Agent. P. O. box 53, Providence, R. I.

H. M. HANNA, PRESIDENT. JOHN F. PANKHURST, VICE PRESIDENT AND GENERAL MANAGER. LUTHER ALLEN, SECRETARY AND TREASURER

THE GLOBE IRON WORKS COMPANY

BUILDERS OF

IRON AND STEEL STEAMSHIPS

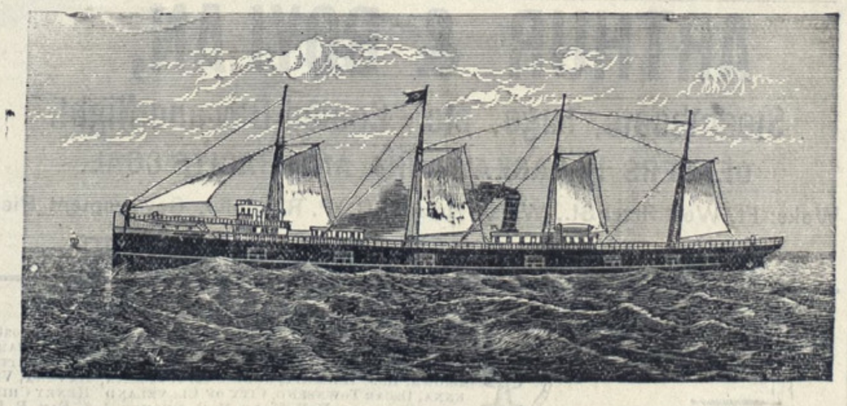
AND VESSELS OF ALL DIMENSIONS,

Triple Expansion, Compound, High Pressure and Low Pressure

MARINE AND STATIONARY ENGINES,

MARINE, STATIONARY & PORTABLE BOILERS.

Blast Furnace and Rolling Mill Machinery, Hoisting and Pumping Engines, Portable Hoisting Engines.



Steam Pumps, Steam and Hand Windlasses, Winches, and Marine Appliances of Every Description.

GENERAL SHEET AND PLATE IRON WORKERS,

Machinists, Boiler-Makers and Founders.

Builders of

IRON STEAMSHIPS "ONOKO," "WM. CHISHOLM," "J. H DEVEREUX," ETC.

STEEL STEAMERS "SPOKANE" "CAMBRIA," "CHAS. J. SHEFFIELD," "IRA H. OWEN," "CORSICA."

PASSENGER STEAMER "DARIUS COLE" AND STEAM YACHT "TWILIGHT."

IRON TUGS "INTERNATIONAL" AND "RECORD."

OFFICE & WORKS, Spruce and Elm Streets.

IRON SHIP YARD, Old River Bed, foot of St. Paul St

CLEVELAND, OHIO.

Established in 1859.

HENRY LEOPOLD.

Manufacturer and Dealer in all kinds of fine and plain *FURNITURE & UPHOLSTERY,*

Mattrasses and Vessel Furniture

A SPECIALTY.

Warerooms 798 and 800 Lorain-st., near Fulton. Factory 10 Willet-st.

CLEVELAND, OHIO.

Cleveland Dry Dock Co,

Shipbuilding, Drydocking, Repairing and Spar Making.

CLEVELAND, OHIO.

CARLETON & COLE,

Port Huron Machinery & Supply Depot,

PORT HURON, MICH.

Manufacturers' Agents and Dealers in Boilers, Engines, Steam and Wrecking pumps, Engineers Supplies, and Fit-outs for Steamers and Vessels.

405 and 407 Water st., East.

Look Out For Breakers.

Dont leave port without a case of

DODGE'S CANVAS OIL BAGS

aboard, filled and ready for use. You may need the before the season is over,

Mortimer H. Dodge, 122 Water St., Cleveland.